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H. BILDWELL EDITOR

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Eclectic Magazine

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DR. CARPENTER'S MENTAL PHYSIOLOGY.*

FROM the very earliest time in which traces of scientific methods can be found, thinkers have gravitated to one or the other of two schools, which may be roughly designated as the Physical and the Intellectual. Thales, Anaxagoras, and Epicurus, whatever their mutual differences, stand out in a general strong contrast with Plato and his followers. So do Newton and Young, and the whole series of mathematicians in England and on the continent, with Malebranche, Berkeley, Hartley, Kant, Fichte. The one school is preoccupied with the phenomena of the external world; with the other the primary object of interest is the nature of Man, its inhabitant. The former delights in tracing the operation of laws which, as they gradually unfold themselves, tend more and more to sim-

plification. Relations are discovered between groups of facts which at first seemed entirely disconnected from one another; and an expectation arises which, as it is founded upon an ever-widening experience, appears entirely conformable to reason, that so far as inanimate substances are concerned, whatever exists at any one moment is the necessary outcome of the immediately previous condition; so that the truest picture which the imagination can form of this portion of the universe will be one in which it is represented as a chain made up of an infinite number of links, both ends of which are hidden from our eyes. If animated nature (leaving Man for the present out of consideration) be also taken into account, this conception appears at first to be inappropriate. But here, again, fur-ther investigation does much to revive it. The instincts of animals appear to be as universal in their operation as the laws of gravitation; and their movements, in some instances, are confessedly

^{*} Principles of Mental Physiology, with their applications to the Training and Discipline of the Mind, and the study of its Morbid Conditions. By William B. Carpenter, F.R.S., C.B. London and New York, 1875.

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undistinguishable from those of mechanical action. There naturally arises a great temptation to generalise in the direction thus indicated; to bring all animal life into the same category; and to regard the act of the hound pursuing his prey by scent through the tangled brake, as in no way differing from that of the fly-catching plant, which closes on the insects that touch it, or even from that of the stone which falls when the support that kept it up is removed. Finally, man, with his complicated nature, is thought by some to furnish no exception to an universal law of necessary evolution. The creations of Shakespeare, and the movement of the loggin-stone of the Land's End, in their view equally owe their origin to the unfolding of an infinite web of succession, the one modified as little by the personality of the poet as the other by the choice of the block of granite. Dr. Carpenter gives a few extracts from a book of the late Miss Martineau and Mr. Atkinson, which he justly regards as the most thorough-going expression of this doctrine in its extreme form. We quote one, not so much on this account, as because it seems to show plainly the path which led to it,-namely, the influence which, as Bacon remarks, the particular pursuit which may enjoy a kind of primogeniture with any thinker, always exerts upon him in the shaping of his philosophy.

'In material conditions I find the origin of all religions, all philosophies, all opinions, all virtues, all spiritual conditions and influences; in the same manner that I find the origin of all diseases and of all insanities in material conditions and causes I feel that I am as completely the result of my nature, and impelled to do what I do, as the need e to point to the north, or the puppet to move according as the string is pulled.'

The school of thought, on the other hand, whose starting-point is the investigation of man's intellectual and spiritual nature, commencing as it does with the facts of individual consciousness, is no less unwilling to contemplate any interference arising out of external laws with the absolute supremacy of individual freedom, than the materialists are to acknowledge the possibility of any arbitrary variation in them. In the earlier ages of society the facts of individual consciousness are the very first which attract, and all but monopolise, atten-

tion. Every force of nature is personified in the philosophy of a primitive people, no less than in their poetry and their mythology. Not only are the trees of the forest, and the brooks which run among them, identified with Dryads and Naiads, not only do Arès and Athenè symbolise the incarnation of brute force and sagacity, but the great problem (which presents itself in different shapes to every age) of reconciling to the imagination the two ideas of Liberty and Law, appears in the Homeric poems as a comparison between the strength of Fate and of Jupiter. Nothing can be more certain than that the notion of personality is a primitive one, of course for many ages altogether undeveloped and crude, but seen to be acted upon wherever there is any record of human doings, implied in every creation of the imagination which has excited human sympathies, and recognised in the language of every portion of the human race. Even when we come to later times, and professed philosophers, the old modes of thought still exhibit themselves where, to our modern judgments, they are most inappropriate. Affection and Strife are the forms under which the materialist Empedocles exhibits the properties which we call attraction and repulsion.

Whatever extension may be given in the immediate future to the cultivation of the physical sciences, and however widely they may come to be substituted in the higher schools for the studies which have hitherto nourished the mental growth of the upper classes of England, there is little fear that the effects will follow which some apprehend. The favorite study of mankind always has been, and always will be, man himself-and not man as a machine, but as a living, acting, feeling, thinking being, the subject of hopes and fears, aspirations and aversions. If the Roman satirist, when he described his work-

'Quicquid agunt homines, vitium, timor, ira, voluptas,

Gaudia, discursus, nostri est farrago libelli'—

could have suspected that a time would ever arrive when the various features in the picture of human corruption which he painted, would be regarded by philosophers of reputation as mere symbols

expressing the reflex action of nervous currents, he would undoubtedly have given vent to his spleen at the influence of foreign savants in even bitterer terms than those in which he indulges. But such indignation would have been as misplaced as the terrors of some modern divines are. Every new idea creates an enthusiasm in the minds of those who have first grasped it, which renders them incapable of viewing it in its true pro-portions to the sum total of knowledge. It is in their eyes no new denizen of the world of facts, but a heaven-sent ruler of it, to which all previously recognised truths must be made to bow. As time goes on, truer views obtain. The new principle ceases to be regarded either as a pestilent delusion or as a key to all mysteries. Its application comes to be better defined and its value more reasonably appreciated, when both idolaters and iconoclasts have passed away, and a new generation begins to take stock of its intellectual inheritance.

The book of Dr. Carpenter is an attempt to mediate between the extreme Psychologists and Physiologists. He regards the causative power of the human will, and the self-determined condition of the individual man in the exercise of it, as primary facts of which we have the complete evidence in our own consciousness. But not the less does he accept, with certain limitations, the doctrines which the Physiological School urge as incompatible with such a view. He frankly confesses their merits at the outset.

'What modern research seems to me to have done, is to elucidate the mechanism of Automatic action; to define with greater pre-cision the share it takes in the diversified phenomena of Animal life, psychical as well as physical; and to introduce a more scientific mode of thought into the Physiological part of the inquiry. But in so far as those who profess to be its expositors ignore the fundamental facts of consciousness on which DesCartes himself built up his philosophical fabric, dwelling exclusively on Physical action as the only thing with which Science has to do, and repudiating the doctrine (based on the universal experience of Mankind) that the mental states which we call Volitions and Emotions have a causative relation, they appear to me to grasp only one half of the problem, to see only one side of the shield. That the principle of the conservation of Energy holds good not less in the Living body than in the Inorganic world, I was myself among the earliest to maintain. That in the most powerful muscular effort which can be called forth by the Human Will, there is no more a creation of Energy than in an Automatic convulsion, I believe as firmly as Professor Clifford. And that the general tendency of modern scientific research is to extend the domain of Law to every form of mundane change—the belief in the Uniformity of Causation being now assumed as axiomatic in all scientific procedure—I recognise as fully as Mr. Herbert Spencer.'—Preface, p. xvi.

There is no question that automatism, including in that term both mental and bodily activities, plays a very large part in the life of every one. What the limits of that part are is the real question at issue, and this it is the object of Dr. Carpenter's work to point out. The book is, in fact, a survey of the borderland between the region of Physical Causation and Moral Causation, taking its departure from the ground of the physiologist. It naturally enters largely into anatomical details, which however necessary for the establishment of the author's argument in the minds of his fellow-experts, are the reverse of attractive to the general reader. We will therefore endeavor to spare him as much of these as we can without injury to the understanding of the case.

That all our knowledge of the external world arises from the impressions made upon our senses is allowed by all philosophers of whatever school since the time of Locke; but the really important point to ascertain is, whether, in the very act of acquiring this knowledge, we have not evidence of something more than the external worldthat is, of the Ego, the sentient subject, our own personality. It might be possi-ble to acquiesce in a denial of this, if the whole of our existence consisted of one unvarying, single sensation; but as soon as ever any the least variation of this is perceived, personality shows itself in its simplest form, viz.—as the identical subject of two diverse sensations. Let us merely suppose these sensations multiplied and varied, each in its turn leaving its trace in the shape of a remembrance, and the result will be something analogous to what is continually experienced in a dream, where image after image springs up in an apparently arbitrary manner, the sleeper bearing no other

moving phantasmagoria.

Now in this simplest form of personality there is not involved the idea either of knowing or of acting. The Ego is in it nothing more than the passive recipient of a string of impressions. He can have no thought either of any law by which this succession is regulated, or of any power in himself of modifying them. We will, however, proceed a step further. Let us suppose these sensations divided into several similar groups. The observation of this regular recurrence constitutes an elementary knowledge for the Ego. He apprehends an order by which his sensations follow one another. Now, let us suppose that these groups, though infinite so far as appears in number, are divided into several classes (which we will denote by the letters of the alphabet), so that there are several A's, several B's, several C's, and so on; and, further, that an A is always succeeded by B, sometimes but not always, also by C, and never by D. The Ego now increases his stock of knowledge, but it is still a communicated, not an acquired knowledge-it is the knowledge of an observer pure and simple, not of a thinker; it is the knowledge of Flamsteed, while noting and tabulating the lunar movements, not the knowledge of Newton, deducing from those movements the law of gravitation. The Ego, by acquiring this knowledge, has become an ens sciens, but as yet is in no respect an ens agens. And however much we may suppose the groups of sensations varied and complicated, and in consequence the aggregate of the communicated knowledge increased for the Ego, he remains still altogether passive, the product (except so far as conciousness is concerned) of external forces, as much as the mature plant is the product of the pains bestowed upon it by the gardener. If then the matured powers of the man are really developed out of simple sensations by a similar process, however wonderful and elaborate, it can not be contested that he must be classed in the same category as the plant.

But now let us see how far the phenomena even of infancy warrant any such conclusion. Our classes of sensations, just now denoted by the letters

part in it than that of the spectator of a of the alphabet, are here those which reach the sentient subject, the infant, through his several senses. The physiologist teaches us that in sight, for instance, a certain impression is made on the retina of the eye, just as in photography an impression is made on prepared glass; and the first effect of this is to generate nerve-force in the optic nerve along which it is transmitted to the ganglionic centre of the latter, which forms part of the sensorium.* The olfactory and the auditory nerves perform a precisely similar function in the case of smelling or hearing. All these nerves have in themselves no sensation; their sole employment being to convey, like a telegraph, the message from without, and they may be pricked or pinched without evoking any sign of pain. It is altogether different with the nerves which minister to the power of movement, as well as convey to the Ego the information supplied by the senses of touch and of muscular resistance, and which, on this account, have received the name of the sensori-motor nerves. Microscopic observation exhibits them as bundles of minute fibres, of which each is isolated from the rest, like the wires in a submarine cable, by a peculiar substance known as the 'white substance of Schwann.' They are of two distinct kinds—the afferent, which convey to their proper ganglionic centres the sensations indicated by the touch, and the sense of muscular resistance, and the efferent, which, proceeding from these ganglionic centres, produce movement in the appropriate members through muscular contraction. The combination of the two is like a compound telegraphic arrangement, by which information is transmitted from the point A to the point B, and orders derived from that information (not the information itself) forwarded at once to a third point C. In many cases, this is purely an automatic proceeding, as, for instance, when the soles of the feet are tickled, the involuntary result is a twitching convulsion of those members. But in others

^{*} By this term may be understood the aggregate of the ganglia in which the spine and the several nerves centre, lying under the higher hemispherical portion of the brain, the cerebrum.

the volitional character is manifest, as when we find by our sensations that a weight carried on the shoulder is awkwardly placed, and therefore we vary its position to render it more tolerable.

Now, the first manifestation of volitional movement in the infant is un-doubtedly obscure. He turns in his doubtedly obscure. He turns in his cradle towards a light; and this is doubtless an automatic result occasioned by the attraction of its brightness. But the same can hardly be said of his handling an object presented to him, which, if in its origin stimulated by an external impulse, almost instantly assumes another character, when he places the object at different distances from his eyes, carries it to his mouth, turns it in various ways, strikes it against the side of his cradle, and endeavors to pull it to pieces. It is impossible for any one who watches these acts to conceive them to be nothing else than a sequence of phenomena, each springing out of the one preceding it by a mechanical necessity. There is manifestly a comparison going on of the different sensations that have been excited; and comparison in its most elementary form implies attention, that is, concentration upon some portion of whatever is presented to the Ego to the comparative neglect of the rest. Indeed, it seems undeniable, that even in any single experience of muscular resistance, there must be awakened the consciousness of a force to the exercise of which that resistance is offered; in which case the evidence of the existence of the Ego as an active force, can not but be regarded as arising contemporaneously with that of the existence of the non-Ego-the external world, the limit of such active

Automatism, however, undoubtedly plays a very large part in the bodily actions, and, according to Dr. Carpenter, in mental operations also. The acts of breathing, of coughing, and of sneezing are mainly independent of the will. The muscular movements which effect them are evoked by agencies over which the will has no control. The beating of the heart is even more striking. It may be, and often is, modified by emotion, but never by a simple effort of will without the presence of emotion. It is obvious that but for this automatism, in many

maintenance of life. The circulation of the blood would cease from mere neglect of the agency which keeps it in motion. But this Primary Automatism, as it may be called, yields in interest for the present purpose to Secondary Automatism, a name given (first by Hartley) to actions which come to be performed by habit without will, or even consciousness; but which were originally learned by volitional effort. Walking is the most obvious example of this class of actions. The power is attained gradually, and at the cost of considerable pains. mere balancing of the body in a standing position involves the combined action of almost every muscle; and the advance of the most finished acrobat beyond this achievement is far less than that which he must have made in acquiring it. Yet it is a matter of daily experience that in walking we pay no attention whatever to what we are doing after once determining in what direction we shall proceed. Very generally we are altogether absorbed in conversation with a companion, or, perhaps, in meditation on some subject which happens to occupy our minds. Mr. Mill thought out the greater part of his 'System of Logic' during his daily walks between Kensington and the India House; and no one who passes through the Bank of England, during business hours, will be able to fancy that, of the hurrying crowd he sees, a single individual is bestowing a thought upon that 'co-ordination of his muscular actions,' without which it would, nevertheless, be impossible for him to carry his dividend-warrant to his banker's.

But let us suppose one of these men of business suddenly seized with blindness. He would instantly stop in his career, although just before, while hastening over familiar ground, and taking no heed of anything but the matter uppermost in his thoughts, he was utterly unconscious that his eyes were rendering him any service at all. Here, then, it is plain that not only was there a mechanical co-ordination of the locomotive muscles, but likewise co-ordination between them and the visual organs. Yet of this the merchant had not the slightest conception. From the time he set out, therefore, he has been the subject of an extremely complicated automatism, no cases, there would be no security for the volition having been exerted by him any more than after having put himself into a cab, volition would have been exerted by him in driving it. The whole act of going from place to place is, of course, volitional; but the volitional character of it does not permeate the entire sequence of motions, but is derived from the initial purpose. The merchant wills to go to his banker's, and he wills to go by walking. His purpose brings his eyes and limbs into action, and between them they perform the operation which he desires to see effected; but they, nevertheless, perform it automatically, his will no further interfering after having once given its command, and his attention being occupied by altogether different matters.

The important part played by the cooperation of the senses, of which we are all the time unconscious, is exhibited most clearly in some cases of accident. Thus the sensory nerve of a limb may be paralysed, while the force of the motor nerves of the same limb remains. But the latter can not by any effort of the will be brought into action (the sense of muscular resistance being lost through the paralysis of the sensory nerve) with-out the aid of the eye. A woman thus affected found that she could not support her infant on her arm without constantly looking at it. The removal of her eyes for a moment, in spite of her knowledge that the child was resting on her arm, and of her desire to sustain it, was at once followed by a relaxation of the contracted muscles.

The reflex movements, as those are called which are produced by the motor (or efferent) nerves in response to the messages conveyed through the afferent nerves, are not necessarily accompanied by feeling.

Till the head of a frog be cut off, and the spinal cord be divided in the middle, so that the forelegs remain connected with the upper part, and the hind legs with the lower, each pair of members may be excited to movement by a stimulus applied to itself, but the two pairs will not exhibit any consentaneous motions, as they will do when the spinal cord is undivided.

In a case of paralysis of the lower extremities, recorded by Hunter, the patient was asked whether he felt the irritation by which 'reflex movements' in his legs were produced, and replied, 'No, sir, but you see my legs do.' In

two cases of injury to the spine, recorded by Dr. William Budd, in which sensibility of the legs was for a time nearly destroyed, and voluntary action entirely so, violent contractions followed the tickling of a feather in the hollow of the instep, although the patient was quite unconscious of the cause of them. It is remarkable that in these cases, as recovery (which took place very slowly), progressed, and voluntary power gradually returned, the susceptibility to the involuntary reflex movements diminished.

Dr Carpenter holds that the will, when carrying into action a determination of the intellect, does not act directly upon the muscles which execute the mandate, but indirectly through the automatic mechanism, of which the act of walking, as we have just seen, furnishes a familiar example. The head-quarters (so to speak) of this mechanism is the axial cord, receiving, as it does, all the nerves of sense and giving out all the nerves of motion; and this, under different modifications, is found in all animals.

'We should form,' says Dr. Carpenter, 'a very erroneous notion of what essentially constitutes the brain of a Vertebrated animal, and of the mutual relations of the aggregate of ganglionic centres of which it is composed, if we were only to study it in Man. For the great relative size and complexity of his Cere-For the brum tends to conceal the fundamental importance of those ganglionic centres on which it is superposed, and which constitute no less an important part of his brain than they do of that of Fishes; although their proportional size is so much less as to lead to their being commonly regarded as merely subordinate appendages to the Cerebrum. The brain of a FISH is almost entirely composed of an aggregate of ganglia of Sense, which may be regarded as collectively constituting its Sensorium, that is, according to ordinary phraseology, the "seat of consciousness," but, more correctly, the Nerve-centre, through the instrumentality of which the Ego becomes conscious of Sense-impressions. Putting aside the rudimentary Cerebrum, therefore, we may regard the Axial Cord of the Fish (consisting of its Spinal Cord with the Sensory ganglia) as the instrument, like the gangliated cord of the insect, of its automatic movements; of which such as are executed through the Spinal centres do not involve Sensation, whilst in those of which the Sensory Ganglia are the instruments, Sensation necessarily participates. When, on the other hand, in ascending the Vertebrate Series from Fishes toward Man, we compare the different grades of development of the Cerebrum with the successively augmenting manifestations of intelligence (as exhibited in what we must regard as

an intentional adaptation of means to ends under the direction of experience), we find so remarkable a correspondence as scarcely to leave room for doubt that the Cerebrum is the instrument of those Psychical operations which we rank under the general designation, rational. In proportion as the actions of an animal are directed by this endowment, the number of them that can be said to be primarily automatic becomes not only relatively but absolutely limited; although many actions (especially in Man) which were in the first instance initiated by the Will, come after long habit to be as truly automatic as if they had been so originally. —P. 64.

After tracing the increasing relative magnitude of the cerebrum (or its analogue), as we ascend the scale of vertebrates from its lowest member, the fish, to its highest, man, Dr. Carpenter proceeds to that portion of his work which will chiefly interest the bulk of his readers-the inquiry into the mode in which this highest organ, the cerebrum, is subservient to those higher mental operations, the capacity for which specially characterises man, though among some of the other mammalia may be found (he thinks) distinct approximations to it. The general fact, that the development of the cerebrum indicates the predominance of intelligence over instinct, is universally allowed; and the principle seems to hold good to a great extent, not only when we compare different races of mankind, but even different individuals of the same race,

The anatomical distinction between the cerebral hemispheres of man and the analogous organ of other animals shows itself especially in the complexity of the arrangement of the nerve fibres of which the medullary substance is composed.

'These may be grouped under three princi-pal divisions. The first, which may be dis-tinguished as the radiating fibres, connect the different parts of the Cortical layer* with the Sensori-motor tract on which the Cerebrum is superposed; and it is probable that there are two sets of these, one ascending from the terminals* of the sensory tract of the Axial Cord to the Cortical layer, and conveying to it the result of the physical changes produced in them by the Sense-impressions which they receive; the other descending from the Cortical layer to the terminals of the motor tract of the Axial Cord, and conveying to them the Physical results of the changes which take place in itself. These fibres, which bring the in-strument of Intelligence and Will into relation with that portion of the nervous apparatus which furnishes the Mechanism of sensation and of the automatic or instinctive motions, were called by a sagacious old Anatomist, Reil, the nerves of the internal senses. The second set of fibres brings the several parts of the Cortical layer into mutual communication. The arrangement of these commissural fibres is peculiarly complex in Man. The third set of fibres, termed intercerebral, connects the two hemispheres of the Cerebrum together by a broad band.; also is much more developed in Man than in any of the lower Mammalia. It is altogether wanting in Fishes, Reptiles, and Birds. There is a rudiment of it only in Marsupials and Rodials. Cases have occurred in which it has been nearly, or even entirely, deficient in Man; and it is significant that the chief defect in the characters of such individuals has been observed to be a want of forethought, i.e., of power to apply the experience of the past to the anticipation of the future.'-P. 99.

There is no indication, in the case of man, of a transfer to the cerebrum of the proper attributes of the other nervous apparatus. Its substance is insensible, and no physical impression made upon it is felt by the subject of it. It has been removed from pigeons, the sensory ganglia being left intact; and the respondent motions to external impressions have remained unaltered. The bird seeks out the light parts of a partially illuminated room, and avoids objects that lie in its way. If thrown into the air it flies, and when sleeping at night, with closed eyes and its head under its wing, is roused by the slightest noise, just as in its normal condition.

There is, however, according to Dr. Carpenter, one characteristic of the cerebrum which is common to it and to the sensori-motor nerves-it is subject to reflex automatic action. Regarding mem-ory, from his point of view, as the 'psychological expression of physical changes in the cerebrum,' he considers 'traces' (so to speak) to be left in the latter by each idea which has been formed, and

^{*} This 'Cortical layer' consists of nervecells spread out on the surface of the cerebrum; not as is the case with ordinary ganglia, of which latter they form a sort of internal nucleus. It is covered by the membrane called the pia mater, which, being entirely composed of blood-vessels held together by a connecting tissue, causes a far larger supply of blood to the cortical layer in proportion to its substance than to any other part of the body.

^{*} The 'Thalami Optici.'

The 'Corpora Striata.'

The 'Corpus Callosum.'

each emotion which has been experienced. These, however, rapidly fade away, and remain in the region of unconsciousness until recalled through the process of association. Thus the aggregate of our previous lives, rational and emotional, may be conceived of as a series of pictures on sensitive paper, soon becoming invisible, but still remaining potentially, and at once reproduced under favorable conditions. As an example of this, Dr. Abercrombie relates that a lady in the last stage of a chronic illness, at a lodging in the country, had her infant child brought to see her. After the child had grown up, without any recollection of her mother, she was taken, without knowing it to be such, into the room in which her mother had long before died. She exhibited at once marks of emotion, and explained them to her friends as occasioned by a distinct impression that she had been in the room before, and that a lady in bed there, who seemed very ill, had hung over her in tears. A very familiar instance of this reviviscence of dormant emotions, is the sense of anger or of shame which men feel when accidental circumstances recal to them some passage in their former lives in which they were grossly insulted or in which they failed from weakness in any recognised duty; although, perhaps, for many years they may never have had the matter enter their minds.

The loss of recollection which generally follows upon stunning is a wellknown phenomenon; but there are not wanting instances of an abnormal recollection being evoked by extraordinary circumstances. Dr. Abercrombie relates the case of a man brought into St. Thomas's Hospital, in a state of stupor from an injury of the head. When partially recovered, he spoke Welsh, a language which, before the accident, he had entirely forgotten from long desuctude; but when he had quite recovered, he again completely forgot his Welsh, and got back his knowledge of English. Another case is even more remarkable. A boy at the age of four suffered fracture of the skull, and was trepanned while in a state of complete stupor. After his recovery he retained no recollection either of the accident or the operation; but at the age of fifteen, during the delirium of a fever, he gave 'an ac-

count of the operation, and the persons who were present at it, with a correct description of their dress and other minute particulars.'

But the ordinary experience of life furnishes a good example of the way in which a temporary loss of recollection clearly exhibits itself. In speaking any language with which we are very familiar, we act just as automatically as in the case of walking, which has been considered above. We think in the language, and words spring up spontaneously, expressing the current of ideas which pass through our minds. But the acquisition of the language, even if it be our mother-tongue, is really the result of a long series of mental acts, each of which, on physiological principles, is recorded by some change in the condition of the brain, or of some portion thereof. The structure of this portion is kept up according to the ordinary laws of nutrition; although the material particles continually change, just as the right arm of a blacksmith is maintained in a more highly-developed condition of the muscles; and facility in speaking the language is thus manifestly as completely a secondary automatic faculty as the skill of the accomplished musician, who (to use an illustration of Miss Cobbe's) will execute a piece of Bach's to perfection while carrying on a flirtation with the admirer who is turning over the leaves of her music-book. Now everyone who has travelled has experienced the manner in which a foreign language, with which he has become tolerably familiar, so as habitually to think in it, rises to his lips with considerable difficulty after long desuetude, and yet comes back again to him after a week or ten days. If, again, his knowledge of the language is but small, and he endeavors to accelerate the rate of his advance by resolutely living only with the natives of the country, he will soon be surprised at his own progress; but if, while doing so, his habit of thinking in the language be interrupted by even a very short intercourse with his own countrymen, he will be equally surprised at the change for the worse which has been thereby produced. case, as in the two cases above-quoted, the physiologist would account for the phenomenon on the same principle. The portion of the brain which records the language has, for a time, been brought out of connection with that which ministers to the play of ordinary thought, and yet its mechanism is preserved in working order, ready to be called into action again under favorable conditions. In the last instance, the automatic mechanism of the mother-tongue comes into collision with that of the foreign language, the stronger with the weaker, and naturally disorders the latter, which can only be restored to its recent condition by isolation (a volitional act), and fresh efforts on the part of the learner.

The impairment of the memory in old age is one of the most obvious symptoms of the commencement of general decay.

'It commonly shows itself,' says Dr. Carpenter, 'in regard to new impressions; those of the earlier period of life not only remaining in full distinctness, but even, it would seem, increasing in vividness, from the fact that the Ego is not distracted from attending to them by the continual influx of impressions pro-duced by passing events. The extraordinary persistence of early impressions, when the mind seems almost to have ceased to register new ones, is in remarkable accordance with the law of Nutrition. It is a Physiological fact, that Decline essentially consists in the diminution of the formative activity of the organism. Now it is when the Brain is growing that a definite direction can be most strongand persistently given to its structure. Thus the habits of thought come to be formed, and those nerve-tracks laid down which (as Physiologist believes) constitute the mechanism of association, by the time the brain has reached its maturity; and the nutrition of the organ continues to keep up the same mechanism in accordance with the demands on its activity, so long as it is being called into use. Further, during the entire period of vigorous Manhood, the Brain, like the Muscles, may be taking on some addi-tional growth, either as a whole or in special parts; new tissue being developed and kept up by the nutritive process in accordance with the modes of action to which the organ is trained. And in this manner a store of "impressions" or traces is accumulated, which may be brought within the sphere of consciousness, whenever the right suggesting-strings are touched. But as the nutritive activity diminishes, the "waste" becomes more active than the renovation; and it would seem that while (to use a commercial analogy) the "oldestablished houses" keep their ground, those later firms whose basis is less secure are the first to crumble away,-the nutritive activity, which yet suffices to maintain the original structure, not being capable of keeping the subsequent additions to it in working order. This earlier degeneration of later formed structures is a general fact perfectly familiar to the Physiologist.'-P. 442.

There is a kind of abbreviating process in mental operations, which may serve further to illustrate the principle of the retrocession into unconsciousness of recoverable ideas. The most familiar instance of this is, perhaps, the act of composition. If the object of the writer be to produce conviction, his arguments must be at the same time logical, and suited to the capacity and modes of thought of the reader whom he addresses. They must also be set out in correct and perspicuous language. But none of these considerations are present to the practised writer during the act of composition. He has not a thought at the time of the elementary propositions on which his fabric of reasoning is built up; or of the observation of human nature, which is the foundation of his judgment as to the best way of putting his case; or of the grammatical laws which are obeyed in the construction of his style. He notes them as little as he does the formation of the letters traced by his Yet it is as impossible to doubt that logical readiness, practical tact, and a graceful style are formed from the materials of a mental experience, built up in accordance with the laws of reason in its several applications, as that the printed essay or pamphlet is made up of combinations of letters of the alphabet. So do the speculations of the most advanced mathematicians imply the acceptance of the elementary geometrical truths, although we may safely believe that in the composition of the 'Mécanique Céleste,' the illustrious author never thought of his obligations to Euclid.

The curious question now suggests itself, what is the nature of those sudden intuitions which occasionally present themselves, which, so far as can be discovered, have no connection whatever with any immediately antecedent idea? Are they independent of the general law of association, absolutely severed from the mental condition which has preceded them-Singular Points, as it were, in the great curve of our conscious existence? Or are they the cropping up, unexpectedly, of a link in a chain which has existed all the while below the plane of our consciousness, subject to the same law of association with our ordinary thoughts? The exposition of Dr. Carpenter's views on this subject forms, in

our judgment, the most interesting portion of his work—the chapter on Unconscious Cerebration. He is at some pains to remove the prejudice, which he belives to exist, on moral and religious grounds, against his explanation of the phenomenon.

and for a considerable time try in vain to recollect—some phrase, occurrence, name, or quotation; and some time after we have given up the attempt in despair, the long-lost idea comes all at once into our minds, 'a prepaid parcel laid at the door of consciousness, like a

'Having found reason,' says he, 'to conclude that a large part of our Intellectual Activity-whether it consist in reasoning processes or in the exercise of the Imaginationis essentially automatic, and may be described in Physiological language as the reflex action of the Cerebrum, we have next to consider whether this action may not take place unconsciously. To affirm that the Cerebrum may act upon impressions transmitted to it, and may elaborate intellectual results, such as we might have attained by the intentional direction of our Minds to the subject, without any consciousness on our own parts, is held by many Metaphysicians, more especially in Britain, to be an altogether untenable, and even a most objectionable doctrine. But this affirmation is only the Physiological expression of a doctrine which has been current among the Metaphysicians of Germany, from the time of Leibnitz to the present date, and which was systematically expounded by Sir William Hamilton,-that the Mind may undergo modifications, sometimes of very considerable importance, without being itself conscious of the process, until its results present themselves to the consciousness, in the new ideas, or new combinations of ideas, which the process has evolved. This "Unconscious Cerebration," or "Latent Mental Modification" is the precise parallel, in the higher sphere of Cerebral or Mental activity, to the movements of our limbs, and the direction of these movements through our visual sense, which we put in train volitionally when we set out on some habitually repeated walk, but which then proceed not only automatically, but unconsciously, so long as our attention continues to be uninterruptedly diverted from them. It was by reflection on this parallelism, and on the peculiar structural relation of the Cerebrum to the Ganglionic tract which seems to constitute the Sensorium or centre of consciousness, alike for the external and the internal senses, that the Writer was led to the idea that Cerebral changes may take place unconsciously, if the Sensorium be either in a state of absolute torpor, or be for a time nonreceptive as regards these changes, its activity being exerted in some other direction; or, to express the same fact Psychologically, that mental changes, of whose results we subsequently become conscious, may go on below the plane of consciousness, either during profound; sleep, or while the attention is wholly engrossed by some entirely different train of thought.'- Pp. 515-516.

A very common form of the phenomenon of which the explanation is sought, appars when we desire to recollect—

to recollect-some phrase, occurrence, name, or quotation; and some time after we have given up the attempt in despair, the long-lost idea comes all at once into our minds, 'a prepaid parcel laid at the door of consciousness, like a foundling in a basket,'-to use the very happy expression of Mr. Wendell Holmes. Dr. Carpenter notes the two important facts, that the missing idea generally flashes into our minds either after profound sleep, or when the mind has been engrossed by some entirely different sub-The first of these, perhaps, led the late Sir Henry Holland to regard the phenomenon as due simply to the refreshment which the mind receives after abandoning its vain efforts; a change of occupation being in itself a restorative of mental vigour.

But mental processes of a far more elaborate character than any (whatever they may be) which result only in the recollection of a forgotten quotation, seem to be carried on without affecting our consciousness in any way.

'It seems to me,' says Sir Benjamin Brodie, 'as if there were in the mind a principle of order, which operates without our being at the time conscious of it. It has often happened to me to have been occupied by a particular subject of inquiry; to have accumulated a store of facts connected with it; but to have been able to proceed no further. Then after an interval of time, without any addition to my stock of knowledge, I have found the obscurity and confusion in which the subject was originally enveloped to have cleared away; the facts have seemed all to settle themselves in their right places, and their mutual relations to have become apparent, although I have not been sensible of having made any distinct effort for that purpose.'

Similar experiences are recorded of distinguished authors and scientific inventors. Charlotte Brontë sometimes remained, for weeks together, unable to complete some one of her stories. Then, some morning, on waking up, the progress of the tale would lie clear and bright in distinct vision before her. Mr. Appold, the inventor of the centrifugal pump, habitually went to bed after employing the day in bringing together the facts and principles relating to the practical problem he had in hand, and its solution usually occurred to him in the early morning after sleep. The great

mathematical discovery of the method of Quaternions was made by Sir W. Hamilton suddenly, after a long process of thought, while walking with Lady Hamilton to Dublin:—

'To-morrow,' says Sir William, in a letter to a friend, 'will be the fifteenth birthday of the Quaternions. They started into life, or light, fullgrown on the 16th of October, 1843, as I came up to Brougham Bridge. That is to say, I then and there felt the galvanic circuit of thought close; and the sparks which fell from it were the fundamental equations between i, j, k; exactly such as I have used them ever since. I pulled out on the spot a pocket-book, which still exists, and made an entry, on which, at the very moment, I felt that it might be worth my while to expend the labor of at least ten (or it might be fifteen) years to come. But then it is fair to say that this was because I felt a problem to have been at that moment solved,—an intellectual vant relieved,—which had haunted me for at least fifteen years before.

The first form of the binocular microscope (which gives the effect of solidity by an application of the principle of combination of two dissimilar perspectives, discovered by Wheatstone) labored under the disadvantage of considerable loss of light in producing the desired effect. It could also only be used as a binocular. Mr. Wenham endeavored to devise a method by which, only a single prism being used, the first evil might be remedied, and by the withdrawal of the prism the second disability removed. He thought of this long; but could not hit upon the form of prism which would satisfy the conditions, and laid his microscopic studies for the time entirely on one side. About a fortnight afterwards, 'while reading a stupid novel,' the form of the prism that would answer the purpose flashed into his mind. He at once drew a diagram, and worked out the mathematical conditions, and the next day constructed his prism, which answered perfectly well, and furnished the type upon which all binoculars in ordinary use have since been constructed.

Dr. Carpenter considers that 'Unconscious Cerebration,' or as psychologists would term it, latent Mental Modification, is not confined to intellectual operations, but extends likewise to the sphere of the Emotions. In this way he accounts for the influence which one person imperceptibly, and even unconsciously, acquires over others; although,

perhaps, this would be better described as the subjection to the influence of the former insensibly growing up in the latter. The typical case of this is, of course, that one which affords so ample a field to novel-writers, where two persons of different sexes discover suddenly that they can not live without each other. But, of course, the same principle obtains in the case of the eminent statesman who becomes popular with a whole nation; or with the subtle divine, who succeeds in turning scores of youthful votaries from the faith of their fathers: while both in the one instance and the other the understanding is not unfrequently baffled in its endeavor to trace the steps of the process upon any principle it can accept. But the only sphere of human action in which observation can possibly test the operation of unconscious cerebration is, in our opinion, the purely intellectual one. The infinite complexity of the factors entering into almost every moral act (which appears as their composite resultant) defies scientific analysis.

The hostility to the doctrine of 'Unconscious Cerebration,' to which allusion has been made above, of course has its foundation in an apprehension that the legitimate consequences of such a theory may be found to exclude the idea of a self-determining power, in the individual man,-in other words, to make Will 'the mere resultant of the general (spontaneous or automatic) activity of the Mind, and dependent, like it, upon Physical antecedents.' However widely Dr. Carpenter extends the sphere of automatic activity, he opposes himself most uncompromisingly to this view; and, in our judgment, clearly and satisfactorily confutes it by contrasting the mental condition of a rational agent in his normal condition with that of an insane person, or of one under the influence of opium, or subjected to the operations of the 'Electro-biologists.' In the case of decided insanity the self-determining power is permanently suspended; in the others, temporarily so. In all, the mind having in itself no power of altering the current of ideas which pass through it, remains as it were 'possessed' by them. The individual, while in this condition, is at the mercy of any one who contrives the some dominant idea which sets the automatic machinery in motion. In the year 1850, the art of 'Electro-Biology' brought into fashion by two Americans, who asserted that, by means of an influence only known to themselves, they could subjugate the will of others, paralyse their muscles, pervert the evidence of their senses, and even suspend all consciousness of identity. Their mode of proceeding was to place a small disk of zinc and copper in the hand of the subject of the operation. On this he was to gaze steadily, abstracting his thoughts from everything else, and bending his whole efforts to intensifying the act of gazing. Mr. Braid, of Manchester, who for some time before had been making experiments on the subject of 'Induced Reverie,' pointed out that the zinc and copper disk (which had given occasion to the name Electro-Biology) was quite unessential to the success of the operation, and that its place might be supplied by any object whatever securing a fixed gaze; -the whole secret consisting in the induction of a state of reverie by means of the steady direction of the eyes to one point for a period of time, varying according to the susceptibility of the subjects, usually from five to twenty minutes:

'The longer the steady gaze is sustained, the more is the Will of the individual withdrawn from the direction of his thoughts, and concentrated on that of his eyes, so that at last it seems to be entirely transferred to the latter; and in the meantime, the continued monotony is tending, as in the Induction of Sleep or of Reverie, to produce a corresponding state of mind, which, like the body of a cataleptic subject, can be moulded into any position, and remains in that position until subjected to pressure from without. When this state is com-plete, the Mind of the Biologized subject to remain entirely dormant, until roused to activity by some suggestion which it receives through the ordinary channels of sensation, and to which it responds as automatically as a ship obeys the movements of its rudder; the whole course of the individual's thought and action being completely under external direction. He is, indeed, for the time a mere thinking automaton. His mind is entirely given up to the domination of any idea which may transiently possess it; and of that idea his conversation and actions are the exponents. He has no power of judging of the consistency of his idea with actual facts because he cannot determinately bring it into comparison with them. He cannot of himself turn the current of his thoughts, because all his power of self-direction is in abeyance.

And thus he may be played on, like a musical instrument, by those around him; thinking, feeling, speaking, acting, just as they will that he should think, feel, speak, or act. But this is not, as has been represented, because his will has been brought into direct subjection to theirs; but because, his will being in abeyance, all his mental operations are directed by such suggestions as they may impress on his consciousness."—Pp. 552, 553.

The weakening of volitional control is one of the most characteristic effects of the abuse of opium, even while the intellectual powers may have become usually enhanced.

'The opium eater,' says Mr. De Quincey, 'loses none of his moral sensibilities or as-pirations; he wishes and longs, as earnestly as ever, to realize what he believes possible, and feels to be exacted by duty; but his intellectual apprehension of what is possible infinitely outruns his power, not of execution only, but of power to attempt. He lies under the weight of incubus and nightmare: he lies in sight of all that he would fain perform, just as a man forcibly confined to his bed by the mental languor of a relaxing disease, who is compelled to witness injury or outrage offered to some object of his tenderest love :- he curses the spells which chain him down from motion : he would lay down his life if he might but get up and walk; but he is powerless as an infant, and cannot even attempt to rise.

The effect of the Hachish (a preparation of the Indian Hemp, used in the Levant for the purpose of intoxication) is thus described by Dr. Moreau, a French physician, who studied the subject with reference to its bearing on the phenomena of insanity:—

'We become the sport of impressions of the most opposite kind; the continuity of our ideas may be broken by the slightest cause. We are turned, to use a common expression, by every wind. By a word or gesture our thoughts may be successively directed to a multitude of different subjects, with a rapidity and a lucidity which are truly marvellous. The mind becomes possessed with a feeling of pride, corresponding with the exaltation of its faculties, of whose increase in energy and power it becomes conscious. It will entirely depend on the circumstances in which we are placed, the objects which strike our eyes, the word which falls on our ears, whether the most lively sentiments of gaiety or of sadness shall be produced, or passions of the most oppo-site character shall be excited, sometimes with extraordinary violence; for irritation will rapidly pass into rage, dislike into hatred and desire of vengeance, and the calmest affection into the most transporting passion. Fear becomes terror; courage is developed into rashness which nothing checks, and which seems not to be conscious of danger. The most unfounded doubt or suspicion becomes a certainty. The mind has a tendency to exaggerate everything; and the slightest impulse carries it along.'

A well-known case, related by Dr. Abercrombie, of an officer, who served in the Expedition to Louisburgh, in 1758, presents a curious parallel to the experience of electro-biology in a somnambulism of a peculiar kind. The ordinary somnambulist is generally possessed by one dominant idea, to which all his actions conform. But the individual in question, when asleep, could be completely directed by whispering in his ear, especially if this was done by one with whose voice he was familiar. This peculiarity rendered him the subject of many practical jokes for the amusement of his brother officers. They found him one day asleep on a locker in the cabin, and made him believe that he had fallen overboard, exhorting him to swim for his life. He immediately imitated the movements of a swimmer. Then they told him that a shark was upon him, and that he must dive for his life. This he at once did, with such force as to throw himself on to the cabin floor, which of course, awakened him. After all the experiments, he had no recollection of his dreams, but a confused feeling of oppression and fatigue; and he used to tell his friends that he was sure they had been playing some tricks with him.

The difference between these abnormal states and that of a man of whom the 'mens sana in corpore sano' may be predicated, is plainly due to the self-determining power possessed by the latter, -the Will,-that which qualifies Man as an 'ens agens,' no less than his consciousness as the identical subject of diverse impressions constitutes him an 'ens sciens;' the two phases of personality exhibiting themselves, as we have hinted above, united in the most elementary state of human existence. To know and to act comprises the sum total of Human Capabilities. What are commonly called the Laws of Nature and the Laws of Thought are, in fact, the limiting conditions of knowledge and action, only discoverable by beings endued with the powers of knowing and acting, and-it should be kept in mind-discoverable by them only through the process of exercising those very powers.

It is now through the Cerebrum, the portion which, in Man, bears so large a proportion to the rest of the brain, that Dr. Carpenter supposes the Will to act upon the nervous organisation. The evidence for this is, so far as we are able to judge, at present scarcely strong enough to justify more than the pronouncing it a plausible conjecture, supported by few facts, though, it must be confessed, contradicted, so far as appears, by none. Psychologically, the self-determining power shows itself by selecting from the sequence of ideas which pass through the mind those which appear to it likely, through the process of association, to lead to the one which it seeks; as when, having forgotten the name of some person which we desire to recollect, we recall the place where we last saw him, or the persons in whose company we met him. In thinking out the solution of a problem, it is by an effort of Will that we concentrate the attention on some consideration upon which it seems probable on à priori grounds that the solution depends. mechanism of the mind trained by habit does the rest, sometimes after many fruitless trials, just as the angler casts his fly first under one bank, and then another, of the pool which he is satisfied conceals a trout. The stream of association, always active, suggests an infinite multitude of ideas, of which those that are incongruous are dismissed at once, by the practised thinker often unconsciously, until at last the one appropriate idea rises to the consciousness, and is at once recognised. That this train of thought is accompanied by some modification or other of some portions of the nervous system there seems no more reason to question than that a parallel modification takes place when we speak or walk. Dr. Carpenter, looking at the matter from its physiological side, conceives that the self-determining act which originates it is coincident with some increased supply of blood to a portion of the blood-vessels which surround the cerebrum. A materialist would say, if he adopted the modus operandi, that the sense of self-determination is the reflex action of the Cerebrum in response to the increased supply of blood. But, as we have pointed out, the existence of a force from within, acting in correlation with a force from without,—the Ego with the external world, is implied in every definite human consciousness.

Dr. Carpenter has very fully and clearly described the mode in which the self-determining power operates, in conjunction with the automatism of thought, in the work of the artist and the poet, as well as of the philosopher. He has also shown its operation in the decision of practical questions and the formation of moral judgments. We will not attempt to follow him in these descriptions.

They are, for the most part, in our opinion, perfectly justified by facts: but the great merit of his book is the elucidation of the enormous part which a species of mental mechanism, mainly constructed by each of us from our own experiences, plays in every department of human life; while, at the same time, it becomes clearer, in proportion as this fact is more completely brought out, that Man, while using a wonderful machinery, is not himself a portion of it.—Quarterly Review.

THE GOSSIP OF HISTORY.

fine Essay which laid the foundation of his fame, "a few characters which have stood the closest scrutiny and the severest tests, which have been tried in the furnace and have proved pure, which have been weighed in the balance and have not been found wanting, which have been declared sterling by the gen eral consent of mankind, and which are visibly stamped with the image and su-perscription of the Most High." Of these the great historian considered Milton to be one, and we should most of us like to agree with him. Yet there are some curious stories about Milton, who was perhaps not the pleasantest of men in pri-Thus he is said to have taught vate life. his daughters the Greek alphabet, without attempting to instruct them in the language, in order that they might the sooner be qualified for the irksome task of reading to him authors of whose works they could not understand a syllable. To the common mind this seems a piece of gross selfishness, though it is quite possible that Milton, whose conception of woman's mission was not the highest, may never have imagined he was guilty of an act of injustice in turning intelligent beings into machines. His ideal of female perfection seems to have been the Eve of his own "Paradise Lost," before the fall. Adam lived "for God only-she for God in him"-a view of the marriage tie for which there is assuredly no warrant in the New Testament. And many will consider Dinah, in "Adam Bede," preaching herself to

"THERE are," says Macaulay, in that the simple village folk, as a nobler picture of womanly goodness. In Milton's fame, "a few characters which have been to ded the closest scrutiny and the severate tests, which have been tried in the rnace and have proved pure, which

Another story of Milton is only ludicrous, but one hopes it is not true, for one would like only the loftiest associations to centre round his name. A friend once condoled with him on the loss of his sight, from the point of view that he could never have the pleasure of seeing his wife. "Ah," replied Milton with a sigh, "would that I were deaf as well!" In truth Milton seems to have looked upon his Bessy (No. 3) as a necessary evil, necessary for purposes of housekeeping and cookery. Some of his biographers have represented him as a man of austere life, who made himself miserable by supping on olives and cold water, but it seems more probable that he was something of an epicure in a quiet way, and that a savory stew was very much indeed to his taste. His wife once set before him a dish of which he was exceedingly fond, dressed with nicest culinary art, and as the poet ate, he observed, with his mouth full, by way of expressing his thanks, "Thou knowest that I have left thee all I have." History is silent as to the precise nature of this memorable refection, whether "grisamber steamed," or game "built up in pastry," but those who think Milton had no idea of a good dinner, have only to turn to the description of the banquet with which the Devil tempts our Saviour

exclaims, "to that crude apple which

diverted Eve!"

Yet it seems almost sacrilege to repeat gossip concerning the inspired martyr of English liberty. One is tempted to use the formula employed by Herodotus, when that charming story-teller had given some particularly naughty story relating to a venerated personage, "May I not incur the anger of any God or Hero!" The truth is that half of what constitutes the amusing in the annals of our curious race is composed of facts more or less to the discredit of those who have made a stir in the world. Who, for instance, that has read Fitztraver's song has not learnt to connect the name of Henry Howard, Earl of Surrey, with all that is brightest in chivalry, in poesy, and in love? Yet his passion for Geraldine is well-nigh an exploded myth, and all its romantic incidents have long since receded into the domain of fable. The facts about him are more prosaic, and he seems to have spent his youth much as other "swells" of the sixteenth century-partly, one grieves to find, in the mediæval substitute for wrenching off knockers. Thus we find him summoned before the Privy Council for eating flesh in Lent, and for walking about the streets at night in a "lewd and unseemly manner," and breaking windows with a cross-bow. On the first charge he excused himself; the second he confessed, and on it was committed to prison. It would be interesting to know whether his lordship paid for the windows he broke, as glass must have been dear in the reign of Henry VIII. Poor Surrey! He lived in a barbarous and unnatural age, when too often a man's foes were they of his own household; and he was ultimately convicted of high treason on the joint testimony of his sister, the Duchess of Richmond, and of his father's mistress. It was a judicial murder of the foulest kind

Another Howard, John, dubbed "the philanthropist," may seem, to a sceptical generation, a far less amiable person than the thoughtless and unfortunate Surrey. No doubt he did excellent work in reforming prison discipline; but charity, says a shrewd proverb, should begin at home, and there is too much reason to believe that Howard was a severe, not to say a harsh, parent. He managed to

in "Paradise Regained;" how unlike, he make his son afraid of him, and the result was dismal enough. The young man fell into dissolute habits, which were carefully concealed from the father, and consequently unchecked, till they had brought on a disease which terminated in incurable madness. It is fair to add that Mr. Hepworth Dixon considers the charge of harshness brought against Howard as unfair, but some painful facts are not easily explained away. The best story ever told of Howard is, perhaps, the answer he made to Joseph II. when the latter observed that the law in his own dominions was more clement than in England. There, said the Emperor, men were hanged for many offences for which they would only be imprisoned in Austria. "That is true," rejoined Howard, "but give me leave to tell your Majesty that I had much rather be hanged than stay in one of your prisons." It should be added that some of Howard's prison reforms were of more than questionable utility; and he has the bad reputation of having introduced the system of solitary confinement, the application of which he recommended to refractory boys-"for which," said the mild and generous Charles Lamb, "I could spit on his statue." Had Howard lived in another age and clime, he might have developed into a Torquemada or St. Dominic, and have been distinguished as the founder of an Inquisition. He led a strict life himself, had the highest zeal for the public good, and was probably destitute of natural affections.

It is to the credit of human nature that when a man has rendered great services to his country or to his kind, we resolutely refuse to look at the dark side of his character, and form a glorified picture of him for the mind's eye to rest upon. The portrait of Nelson is not blurred for Englishmen. We are jealous of Byron's reputation, and will scarcely suffer it to be justly or unjustly assailed. With what pleasure should we not hail the fact that a painstaking writer had effectually cleared the character of Marlborough from the stains of avarice and corruption! And yet it is always well to look facts resolutely in the face, for they often explain, and enable us to condone. To know all would be to for-give all. Take the case of Nelson. The murder of Prince Caracciolo and all the

directly to his infatuation for Lady Hamilton. And whence did that infatuation arise? It has been asserted that Nelson gradually became estranged from his wife because she did not take enough interest in his career and seemed hardly to know that her husband was the idolised hero of the nation. If so it was a grievous fault, and the result, with a man of Nelson's temperament, might have been easily foreseen. "My dear, great, glorious Nelson," if we remember aright, was the style in which the wife of a Cabinet Minister, who can scarcely have been personally acquainted with the Admiral, wrote to congratulate him on the victory of the Nile. Lady Hamilton was even more demonstrative, and Nelson took a naïve, almost child-like pleasure in being made much of, and called "great" and "glorious" to his face. He had done great things, and was not ashamed to own that he felt proud of his achievements. Indeed self-assertion on his part occasionally took an unpleasant form. Towards the close of the war with the First Republic, when the general distress was sharp, and bread frightfully dearin 1800 the price of the quartern loaf rose to one shilling and tenpence half-penny -a curious fashion arose of giving dinners in which the guests were asked to bring their own bread. Nelson was invited to such a dinner, but through some oversight he had apparently not been informed of the conditions of the feast, At all events, when he found there was no bread, he made quite a little scene, called his servant, and, before the whole company, gave him a shilling, and ordered him to go and buy a roll, saying aloud: "It is hard that after fighting my country's battles, I should be grudged her bread." One would not like to have been present at that dinner party, still less to have been the host; and, in truth, either Nelson should not have been invited, or an exception should have been made in his favor.

It is also part of the ill-natured gossip of history that Nelson's last signal was not "England" but "Nelson expects every man to do his duty," and that the officer to whom the order was given affected to have misunderstood his directions, and substituted the sentence which was actually telegraphed. Southey says

other bad doings at Naples may be traced it was received by the fleet with enthusiasm, but an eye-witness of the battle has recorded the equally probable fact, that some unideal Britons could not well make out what it meant. "Do our duty?" quoth one of them, "why, of course we shall." In truth, the English dislike of rhetoric (strange enough in a country which has given Parliamentary institutions to the world) amounts to a fault: it makes us think that heroic words are never found in company with heroic acts. This is far from being the case, as a notable incident in the life of General Wolfe will show. After his appointment to the command of the expedition against Canada, and on the day preceding his embarkation, Pitt invited him to dinner. The only other guest was Lord Temple. Pitt's brother-in-law, who afterwards told the story to Thomas Grenville. As the evening advanced, Wolfe, ever so slightly warmed with wine, or, it may be, merely fired by his own thoughts, broke forth into a strain of gasconade. He drew his sword-he rapped the table with it-he flourished it round the room-he talked of the mighty things that sword was to achieve. The two Ministers sat aghast, at an exhibition so unusual from any man of real sense and spirit, and when at last Wolfe had taken his leave, and his carriage was heard to roll from the door, Pitt seemed for the moment shaken in the high opinion which he had formed of Wolfe: he lifted up his eyes and arms, and exclaimed to Lord Temple, "Good God! that I should have entrusted the fate of the country and of the administration to such hands!" Few anecdotes rest on better authority, yet it may be hoped that Lord Temple or Mr. Grenville was guilty of a slight inaccuracy in putting into the mouth of Pitt the words, "and of the administration," which sound like bathos, whereas Pitt always spoke and thought in the loftiest strain. Indeed, in judging Wolfe, the great statesman might have known, from the best of evidence, that "tall talk" is occasionally the herald of great actions. "My Lord," he had said in 1757 to the Duke of Devonshire, "I am sure that I can save this country, and that nobody else can"-which proved to be the true state of the case.

In spite of "goody" books, which profess that genius is invariably accompanied by modesty, at least half the famous men of history have been intensely egotistical, and strenuous asserters of their own merits. "After all, what have I done?" exclaimed Napoleon one day, as if to silence a flatterer. "Is it anything compared with what Christ has done?" Indeed, one of Napoleon's arguments for the truth of Christianity seemed to be that Christ, having founded a mightier empire than his own, must necessarily have been more than mortal. Heroes are apt to reason curiously. Neison told Lord Holland that he often felt pain in the arm he had lost, "which," added the gallant warrior, "is a clear proof of the immortality of the soul-and sets the question completely at rest." This remark would have been hailed with delight by that ingenious theorist who held that puzzle-headedness conduced to celebrity, and who, by the way, defended his opinions with singular skill. He had once maintained at a dinner party that most men who have attained suddenly and rapidly to fame have been puzzleheaded. "What do you say," objected one of the company, "to Mr. Pitt? He was an admired statesman at the age of twenty-three; and was he a puzzle-headed man?" "Why, not generally such," was the answer, "but he was such in reference to the particular point which mainly contributed to obtain him that early and speedy popularity. Look at the portraits of him at that time, and you will see a paper in his hand, or on his table, inscribed 'Sinking Fund.' It was his eloquent advocacy of that delusion (as all, now, admit it to have been) which brought him such sudden renown. And he could not have so ably recommended -nor indeed would he probably have adopted—that juggle of Dr. Price's if he had not been himself the dupe of his fallacy; as Lord Grenville also was; who afterwards published a pamphlet in which he frankly exposed the delusion."

As a rule, to be puzzle-headed is not so great a hindrance to success in life as want of fixed opinions and principles. A strange story is told of Berryer which illustrates both the utility and the possibility of early making up one's mind, on some of the great questions of religion and politics. When a very young man, with fame and fortune yet to win, Berryer is said to have considered the argu-

ments for Atheism and Republicanism (too often mixed up together in France) as being on the whole quite as good as those for Religion and Legitimism. He felt, moreover, that for worldly success it was requisite that he should not continue all his life a doubter, but have some sort of creed. Should he range himself on the side of Church and King, or for "the immortal principles of 1789?" trying in vain to balance the considerations for and against either belief, he gave up the task in disgust, and decided the course of his life in a singular, one is tempted to say impious, fashion. He took a louis-d'or from his pocket, tossed it up, and said, "Heads, King; tail, Republic." Heads it was, and from that moment Berryer became the sworn champion of Legitimism, and ultimately, no doubt, grew to believe himself the advocate of a true cause. But what if, to use Plato's expression, he did, on that memorable day, take a lie into his soul? There are better rewards than those of worldly success, "the inquiry of truth," as Lord Bacon finely observes, "which is the love-making, or wooing of it-and the belief of truth, which is the enjoying of it—being the sovereign good of hu-man nature." Those words have the ring of a morality at once healthy, honest, and sublime. They are separated toto calo from the strange advice given by Keble to Arnold, when the latter was troubled with doubts as to the doctrine of the Trinity. Keble counselled his friend to take a living and preach incessantly to his parishioners the doctrine in which he only half believed, by way of strengthening his own faith. The advice would seem positively immoral did one not remember that Keble scarcely conceived that doubt could ever be honest, much less well founded. He was once urged by an admirer to write on the subject of the Inspiration of the Scriptures, the limits of inspiration being a subject that was causing difficulties to many thoughtful persons. Keble replied that he feared those who found any difficulties were too wicked to be open to conviction. So unamiable and unjust could be the thoughts of the man who was considered by many of his friends as a saint, and who really was a conspicuous example of human virtue and goodness. The fact is that the character which has, in a somewhat narrow sense, been peculiarly called "saintly" is very far from being agreeable. It is not pleasant to read of Thomas à Becket that "he swarmed with vermin" (effervescebat vermibus), nor does one like Isabella the Catholic any the better for learning that she was wont to rejoice and give thanks at the sight of a gallows with a man hanging therefrom, which may possibly be the origin of the story about the traveller who was delighted to see a gibbet, as a proof that he was in a civilised country. Pleasanter is that trait of Oueen Henrietta Maria, who fell down on her knees, crossed herself and uttered a short prayer, when, in one of her first walks on English soil, she came suddenly in view of Tyburn, with its ghastly spectacle of corpses swinging in the wind. And here it may be observed that the gossip of history, if it tends to lower some great names in our esteem, yet helps to raise others. In the kingdom of knowledge, as in the kingdom of heaven, many that are first shall be last and the last first. The character of Noy, Charles I.'s Attorney-General, is not a lofty one, yet there is something very human and even touching in the account of his last will. He bequeathed a fine fortune to his son "to be squandered as he shall think fit-I leave it him for that purpose, and I hope no better from him." Noy drew the writ for levying shipmoney, and did many other improper things, but one may take leave to like him quite as much as a model reformer of prisons. Noy evidently loved his son, and could not bear to be harsh to him, possibly too he thought he discerned in the young man some feeling of pride which would spur him so to live as to falsify the prediction. Unhappily, the lad only fulfilled the anticipation expressed in his will :-

Drank, revelled, fought, and in a duel died-

if one may slightly modify a verse of Pope in deference to the susceptibilities of Mrs. Grundy.

Sixty years ago the name most abhorred by lovers of freedom in England and elsewhere was that of Lord Castlereagh. The Tory Minister for Foreign Affairs, in the days of the Holy Alliance, was supposed to be the determined enemy

of liberty throughout the world, a man of harsh and cruel purposes, ruthless in carrying them out. When the unhappy statesman died by his own hand, many must have been surprised at the evidence given by his valet on the inquest. "Had he any reason to suppose that his Lordship's mind had been deranged of late?" "Well, his Lordship had been a little strange of late."—"For instance?"— "Well, he spoke harshly to me a day or two before his death." It is satisfactory to think that the political fame of a man who was evidently so genial and kindly in private life is beginning to clear itself by the light of contemporary memoirs. Whatever may have been his faults, Castlereagh was a true Englishman, and had the interests of his country sincerely at heart. In any case his is the merit, in great part, of the two last and only successful coalitions against Napoleon; and it must have been a patient and skilful diplomacy which combined the forces destined to conquer at Leipsic and Waterloo.

Some novelists, if no serious historians, have attempted to draw flattering likenesses of James II., but most men will be of opinion that he was fairly gibbeted by Macaulay. The man looks so contemptible, deserting a young and pretty wife, for ugly mistresses. "I can't find what he sees to admire in me," said Catharine Sedley; "certainly 'tis not for my beauty—and as to my wit, he has not enough to see that I have any." The accomplished Marquis of Halifax had an equally poor opinion of his intellect, and was wont to say of Charles and James, that "the elder could see things if he would, while the younger would see things if he could;" a cruel sentence, which is yet something of a compliment to the moral nature of James. He must, indeed, have had some good qualities, for he was devotedly served in the days of his exile, and men rarely devote themselves for a principle which is not more or less amiably incarnate. There is a little story told of James, which shows that he possessed at least some of the Stuart urbanity. He was sitting to Sir Godfrey Kneller for a portrait designed as a present to Pepys, when the news of the landing of the Prince of Orange was brought to him. The King commanded the painter to proceed and

finish the portrait, that his friend might

not be disappointed.

Of James's successful rival, on the other hand, Macaulay's portrait must be considered too flattering, especially by contrast. William was not only an unfaithful husband, but as ostentatious in his infidelities, as careless of conventionalities, as little regardful of his wife's feelings as Charles II. Now, Macaulay gives one a good deal of precise information about the private life of the two last Stuart kings, and touches but lightly on the failings of William. He even goes out of the way to praise the latter for trying to compel one of his officers to marry a young lady whom he had wronged-excellent counsel, no doubt, but which must have come with bad grace from a man whose morals were in no wise above the level of the age in which he lived.

There is an anecdote told of our Dutch ruler which reflects some little credit on him, though not much-for he could hardly have acted otherwise—but which is chiefly worth relating for the curious light in which it sets the first constitutional King of England. William had sentenced an insubordinate regiment to be decimated. The soldiers accordingly drew lots, every tenth man, of course, drawing a prize—the prize of death. Not unnaturally one of the winners felt disposed to sell the lot he had drawn, if haply he could find a purchaser. One poor fellow at length agreed to be shot in his stead for a hundred pistoles to be paid to his relatives after his execution. William, having been informed of the bargain, sent for the soldier, and asked whether what he had been told was true. "Yes," replied the man, sulkily, "I have run the risk of being killed all my life for next to nothing a day, and now I can secure my wife and children something substantial. I am ready to die." William pardoned the man-he could hardly do less, and gave him the hundred pis-Martial law was formally recognised by Parliament in 1689, but the decimated regiment must have been a Dutch or German one, for English public opinion would at no time have tolerated such a barbarous mockery of justice. Dutch ideas of liberty, however,

were always curious, or at any rate ex-

points from English ideas, and, somehow or other, we incline to the latter as the sounder.

Yet there was much that was loveable in the character of William, who was a staunch friend and a generous foe; and perhaps he is the most estimable in the long line of our sovereigns, with the exception of Alfred, and perhaps of Cromwell. Alfred, by the way, comes nearer to perfection than any prince of whom history makes mention, though scandal was once busy even with his stainless name. In youth he is said to have been dissipated, and even to have alienated his subjects by his misgovernment and immoralities. If so, he made a noble atonement. A propos of the great English king, every one knows the story of the burnt cakes and the scolding he received from the cowherd's wife, but the conclusion of the story is not so generally known. According to William of Malmesbury and other later chroniclers, the cowherd, whose name was Denulf, having afterwards, on Alfred's recommendation, applied himself to letters, was made by him Bishop of Winchester, and was the same Denulf who died occupant of that see in 909. But what became of Mrs. Denulf? Possibly she lived to be an antetype of Mrs. Proudie, for the English clergy in the pre-Conquest days were not averse from marriage, and nearly two centuries were yet to elapse before Gregory VII. should introduce a uniformity of celibacy and hypocrisy into the Church. But of course the assertions of the worthy precentor of Malmesbury must be taken with an occasional grain of salt, as when, praising the strict and efficient police kept by Alfred in his dominions, he says that a purse of money, or a pair of golden bracelets, would in the time of this king remain for weeks exposed in the highway without risk of being stolen.

Perhaps few kings in the whole list appear more contemptible to the English, and especially to the modern English, mind than Edward the Confessor. There is even an Oxford tradition to the effect that, in his defection from the Church of England, Dr. Newman was nearly being followed by a distinguished scholar, who, however, had one difficulty which he never could get over. He had made up hibited a striking discrepancy on some his mind to accept one point of doctrine after another, but the proverbial straw was the canonization of St. Edward. He finally decided that the Church which had deified so poor a specimen of humanity could not possibly be the infallible guide of men. We are not careful to defend the character of Edward, whose name ought nevertheless to be dear to a certain class of nineteenth century politicians, as one of the earliest lovers of peace at any price-a circumstance which probably facilitated the Norman Conquest, But the English long looked back with regret upon the golden days of King Edward, when the Dane had ceased to vex and the Norman had not yet come to trouble. Edward seems, moreover, to have been a just and benevolent ruler, and if he favored the monks unduly, yet the monks, with all their faults, were the most respectable

part of the population. It has been objected to Dr. Lingard that his fundamental rule of judging seems to be that the popular opinion on a historical question can not possibly be correct, and such a tendency the study of the gossip or merely anecdotical part of history is sure to generate. For it is of the essence of gossip that it should represent its subject in a different light to that in which he usually appears. Perhaps the truth about it would be that gossip is a good leveller, and reduces kings very much to the level of common men. No man is a hero to the chronicler of scandal. When Lord Thurlow was told that Pitt was dead, " A - good hand at turning a period" was the only comment he made. So the inveterate raconteur smiles when he hears the praises of any one too enthusiastically sung; he can not help recalling some funny little story about him. Few have the noble magnanimity of Bolingbroke, before whom the character of his political enemy Marlborough was once discussed. Some one appealed to Bolingbroke as to whether the Duke had not been extremely avaricious. "He was so great a man," replied Bolingbroke, "that I have forgotten his vices." It is to be feared, nevertheless, that Marlborough's avarice can not be denied, and it is, indeed, supported by a hundred stories. A beggar once asked an alms of Lord Peterbor-

Marlborough," replied the Earl, " and to prove it to you, here is a guinea."

Charity, by the way, has been the occasion of many a happy saying. Malherbe was very generous, but, one is sorry to learn, not religious. One day he gave a beggar some silver, and the beggar assured the poet that he would pray for him. "Pray do not trouble yourself to do that, my friend," replied Malherbe; "judging from your own condition, I should hardly think you had much credit with Heaven." This was rather wicked, and reminds one of that Queen of Spain who lost her husband, and who was so grieved and so indignant against the Celestial Powers, that she forbade her subjects to believe in God for six whole months, "to give Him a lesson." The author of this anecdote, however, has forgotten the name of the Queen, and history has been equally forgetful, More authentic is that haughty observation of William Rufus that "if he had duties towards God, God had also duties towards him." Happier, had it been more reverently expressed, was the thought of Alfonso the Wise, of Castile, who, after drawing up his astronomical tables in accordance with the scientific theories of the day, and placing the earth in the centre of the universe, remarked that, had he been consulted, he should have placed the sun in the centre.

But before the handmaid Charity is dismissed she must be made to tell a slightly improper story. According to an ancient chronicler, Saint Bernard, as Abbot of Clairvaux, was exceedingly hospitable to all who claimed the shelter of the monastery. Like a kindly host, he thought, moreover, that he was bound to keep his guests in countenance; and one day, accordingly, when he had drunk, cup for cup, with some thirsty travellers, possibly German Barons, the Saint—one blushes to write it—behaved even as one who hath partaken of cucumbers at a public feast. His monks gently reproached their superior. " Nay, my children," quoth he, with vinous sophistry, "it is not I, but Charity, that hath eaten and drunken.'

can not be denied, and it is, indeed, supported by a hundred stories. A beggar once asked an alms of Lord Peterborough, and called him by mistake "My Lord Marlborough." "I am not Lord of the Gospel. One day he called on a

Minister of State to demand the assistance of the Government in respect of a work of charity. The Minister was obdurate, but M. Bernard was not easily repulsed. He continued to urge his request, and at length succeeded in putting his Excellency into a violent passion. The Minister even forgot himself so far as to give the priest a box on the ear. Immediately Bernard fell on his knees, turned the other cheek, and said, " Monseigneur, give me another buffet and grant me my request." The Minister, already heartily ashamed of himself, and filled with admiration for this true Christian, forthwith granted him all he asked for. Perhaps the precepts in the Sermon on the Mount are no mere figures of speech, but practical lessons of conduct dictated by a wisdom higher than that of the earth. It is said, however, that a Quaker who received a box on the ear with a request that he would put his religion into practice by turning the other cheek, replied, "Nay, friend, but it is also written that with what measure ye mete it shall be measured to you again," and then returned what he had received with interest. A curiously base yet quick remark was that of a fencingmaster whom a certain Lord S. had taken into his service. Lord S. had the deplorable habit of beating his servants, and one day administered a box on the ear to the ex-fencing master. The latter quietly held out his hand and said, "My lord, it is five guineas when I don't repay it."

To return once more to Charity, which is surely a discerner of the thoughts and intents of the heart, and the ways of which are therefore worth studying, there is a story told which redounds much to the credit of the unfortunate and almost imbecile Charles II. of Spain. When very young he was performing on foot the stations of the Jubilee. A beggar crossing his path, the king flung him a cross of diamonds without so much as looking at it, and without anybody at the moment perceiving what he had done. When he had entered the church, however, his courtiers noticed the absence of the cross from his breast, and cried out that their master had been robbed. The beggar, who had followed, immediately came forward, saying, "Here is the cross; 'twas his Majesty who gave it

me." The king confirmed the statement, and then perceived for the first time that he had given away one of the crown jewels. But he was too much of a gentleman to take it back without giving the man an equivalent; and besides, as a Christian and a Catholic, he felt that the gift was sacred, having been made in the very act of prayer. He, therefore, had the diamond valued, and bought it back from the mendicant at its proper value, namely, 12,000 crowns. It was royally done. Less magnificent, but not less sincere, was the charity of Robert II. of France, the gentle, pious king, the author of that most sweet and beautiful of Latin hymns, the Veni, Sancte Spiritus. A thief one day, by a dexterous use of the knife, was cutting the gold fringe from the king's dress. "Stop, my friend," quoth Robert, "you have now half; leave the other half for some one else." It was this Robert who, in spite of his piety and docility of temper, managed early in his reign to embroil himself with the Church, He had married in 995 Bertha, widow of Eudes, Count of Blois, whom he dearly loved; but there were some difficulties as to the lawfulness of the marriage. Pope Gregory V. refused a dispensation, and declared the marriage void. The King refused obedience, in consequence of which he was excommunicated; and it is related how, under this terrible sentence, his palace was deserted by all but two menials, who, after every meal, purified by fire the utensils employed at the Royal table. Robert at length yielded, and put away Bertha in 998, marrying in her stead Constance, daughter of the Count of Toulouse, a beautiful shrew, who led him a dismal life. Often in bestowing charity on his beloved poor, the king would say with a smile that ill dissembled a real fear, "Mind and don't tell the queen." He went on pilgrimages to all the shrines in France, and in 1010 went to Rome to visit the tombs of the Apostles. This last journey he made for three reasons—first, from a feeling of devotion; secondly, to get away from Queen Constance; thirdly (so curious is the mixture of human motives), with the view of inducing the Pope to annul his marriage with Constance, and to sanction his reunion with his first wife, Bertha; which reveals an alarming confusion of ideas on the subject of morality in the mind of the good

Others besides Robert II. have acted on occasion from a curious mixture of motives. If we are to believe one who knew Byron well, Childe Harold went to fight for the Greeks not so much because he cared for Hellenic independence, but because he thought the campaign would be an excellent excuse for escaping from the Countess Guiccioli, of whom he was beginning to weary. But this is ignoble

gossip.

" Je n'aime de l'histoire que les anecdotes!" was the frank confession of Prosper Mérimée, whose hatred of cant led him, perhaps, into the opposite extreme of cynicism and of contempt for his fellow-creatures. "I felt uneasy," he remarked to a friend," when I had to make my first speech in the Senate; but I soon took courage, remembering that I was only addressing a hundred and fifty fools." It is to be regretted that Prosper Mérimée did not undertake the compilation of a Thesaurus of historical gossip, in which anecdotes should have been severely sifted, and each good saying traced to its genuine author. Prosper Mérimée had both the taste and the accuracy of knowledge necessary for the task. The French as a nation are terrible sinners in the matter of anecdotes. They are at once the best story-tellers in the world, and the most untrustworthy; reckless as to the value of their facts, so long as these are amusing and can be wittily arranged. Too often the race is typified by Talleyrand, ever ready to sacrifice a friend or a noble thought to a joke. Count Louis de Narbonne-the one human being, it was thought, whom Talleyrand ever really loved-was walking one day with the Prince de Bénévent, and reciting some verses he had composed. A man who was passing by happened to be gaping. The oppor-tunity was irresistible. "Hush, Nartunity was irresistible. "Hush, Nar-bonne," said Talleyrand, "you are always talking too loud." Talleyrand, by the way, never said a smarter thing than Carnot said of him: "If Talleyrand despises men, it is that he has studied too much his own character." But Talleyrand was at heart a better man than his contemporaries fancied, or perhaps than he fancied himself; while of his talent and of his zeal for the public serv-

ice there can be no doubt. In 1815. when France lay prostrate at the feet of victorious enemies, even then Talleyrand held high language on her behalf. He baffled some of the most cherished schemes of Prussia and Russia, and extorted a disdainful compliment from the Emperor Alexander, who said, "Talleyrand conducts himself as if he were the minister of Louis XIV." This was no small praise. One may add, what is of peculiar interest at the present moment, that more than seventy years ago Talleyrand had devised one of the happiest and boldest solutions of the Eastern Question ever formally suggested by a Western statesman, After the capitulation of Ulm in 1805 he addressed to the Emperor Napoleon a plan for diminishing the power of Austria to interfere with the preponderance of France, by uniting Tyrol to the Swiss Confederation, and erecting the Venetian territory into an independent republic interposed between the kingdom of Italy and the Austrian territories. He proposed to reconcile Austria to this arrangement by ceding to it the whole of Wallachia, Moldavia, Bessarabia, and the northern part of Bulgaria. The advantages he anticipated from this arrangement were that of removing Austria from interfering in the sphere of French influence without exasperating her, and that of raising in the East a power better able than Turkey to hold Russia in check. Had this plan been carried out, Europe might have been saved what threatens to become a kind of chronic crisis, and we should have heard less about the "manifest destiny" of Russia; Constantinople might even have long since become the capital of the Austrian Cæsars.

Our admiration for Talleyrand is increased when we reflect on the character of the sovereigns whom he had to serve. There was hardly room for an able man in the Government over which Napoleon presided, for in that Government the Emperor would be, and was, all in all. Louis XVIII., again, was a prince not easily managed. For one thing, his Majesty's notions of his own prerogative and of the personal deference due to him were preposterous. The proudest nobles "of the old rock" had to be careful in their demeanor. Thus the Marquis d'Avaray, Master of the Robes, presum-

ing on his long intimacy with the King, for whom he and his had ever been ready to sacrifice their lives and fortunes, ventured one day to take a pinch of snuff out of the royal box. The King said nothing, but immediately threw away the rest of the snuff in the box. Frederic the Great behaved more prettily when one of his pages took the same liberty, and for the lad it was almost an impertinence. He had seen the page through a window in the act of taking the pinch. "Do you like that snuff-box?" he called out. The page, reddening to his ear-tips, stammered out that he thought it pretty. "Well, then, take it, my boy," said the King; "it is not large enough for us both." Indeed, notwithstanding all the hard things that have been written of Frederic, one can not help thinking that there was a deep fund of kindness in his soured heart. One instance of his generosity we do not remember to have seen in any authentic history, and it is probably a pure invention; yet the fact that such a story should have been told of him reflects the highest honor on the King. One of his servants, who cherished a grudge against Frederic, put poison into his morning cup of chocolate. As he brought it into the King's room Frederic noticed a look of trouble and agitation in the fellow's countenance. "What is the matter with you?" he asked, looking him steadily in the face. "I believe you mean to poison me." The man threw himself at the King's feet and confessed his crime. "Get out of my sight, you scoundrel!" said Frederic, and took no further notice of the matter. Equally apocryphal is probably the affiliation of that famous saying which has been attributed to Frederic, "Women are like cutlets-the more you beat them the tenderer they become." Indeed, as many legendary sayings and doings are associated with the name of Frederic as with those of Napoleon or Henry IV.

What strikes one most in the verification of the ana is the inventiveness of gentlemen who make history sitting quietly at their desks, and the extreme tameness really displayed on great occasions by the principal actors in the drama of history. How many noble sentiments have been put into the mouths of kings who would not have had the wit to utter them

"royal" speech, if any one cares to peruse it, let him turn to the pages of Saint-Simon. At least it has the merit of not being long. Under the Regency of the Duke of Orleans the Duke of Berry was introduced to the Parliament of Paris. The First President made his highness a complimentary harangue, and it was then the Prince's turn to reply. He half took off his hat by way of salute to the assembly, immediately replaced it, and looked hard at the First President. "Monsieur," he began, then gazed blankly around, and began again, "Monsieur —then turned appealingly round to the Duke of Orleans for help. The Regent's cheeks, like those of his cousin, were as red as fire, and he was wholly unable to help the luckless Prince out of his scrape. "Monsieur," now dolefully recommenced the Duke of Berry, and again stopped short. "I saw the confusion of the Prince," says Saint-Simon, "I sweated, but there was no help for it." Again the Prince looked at the Duke of Orleans, and the Duke of Orleans appeared to be intently studying the form of his own boots. At length the First President put an end to the painful scene with as much tact as he could well display. He took off his judge's bonnet with a low bow to the Duke of Berry, as if in acknowledgment of the Prince's unspoken oration, and then opened the business of the session, to the intense relief of all present. On quitting the Parliament House the Duke of Berry paid a visit to the Duchess of Ventadour, where he was complimented on his speech by the Princess of Montauban, who knew nothing of what had happened, and ventured on what she naturally enough supposed to be a safe piece of flattery. The Duke, now wild with annoyance, hurried away as soon as he could to the Duchess of Saint-Simon's. Once alone with that great-hearted lady, and sure of sympathy, the poor fellow threw himself into an arm-chair, and burst into tears. Madame de Saint-Simon did her best to comfort him, but he refused to be comforted, and showed, it must be allowed, a touching sense of his own degradation. He bitterly blamed "the King" (Louis XIV.) and the Duke of Beauvilliers for the wretched education he had received. "They never thought," he bitterly exclaimed, "but to even as after-thoughts! For a genuine brutalise me, and to smother all that I might have been. I was a younger son, I was distancing my brother, and they crushed me; they taught me nothing but to play and to hunt, and they have succeeded in making of me a fool and a brute, utterly incapable, never to be fit for anything, always to be the laughing-stock and the scorn of mankind?" Such are the realities of history, as pitiful, as affecting, as human in their interest as its fictions.

But to conclude with a gayer page from the annals of the same brilliant Court, there are two more authentic speeches of about the same length as the Duke of Berry's unfortunate production, but much more successful. Louis XIV. was extremely kind to his personal attendants, but when he was, so to say, in his official character of King, "aussitôt qu'il prénait son attitude de souverain," as Madame Campan puts it, his aspect would strike awe into the beholders, and persons who had seen him every day of their lives were apt to be as much intimidated as a young lady at her first drawing-room. Now it chanced that the members of the King's household claimed certain privileges which were disputed them by the corporation of the town of Saint Germain's. Anxious to obtain the King's decision on the matter, the members of the household resolved to send a deputation to his Majesty to urge their

claims. Bazire and Soulaigre, two of the King's valets, undertook to act as deputies, and obtained without difficulty an audience of the sovereign. The next morning, after the early levée, Louis ordered the deputation to be introduced, and at the same time assumed his most imposing look. Bazire, who was to speak, began to have an uncomfortable sinking at the pit of the stomach, and his knees were loosened with terror; he just managed to stammer out the word "Sire." Having repeated this word two or three times, he was seized with a felicitous inspiration. "Sire," he once more began (and concluded), "here is Soulaigre." Soulaigre, looking unutterably wretched, commenced in his turn, "Sire sire,"—then (oh, happy thought!) ended like his colleague, "Sire, here is Bazire." The King smiled, and made answer, "Gentlemen, I know the motive which has brought you here; I will see that your petition is granted, and I am very well satisfied with the manner in which you have fulfilled your mission as deputies." Exeunt Bazire and Soulaigre, lost in admiration of the royal grace and condescension. What power, what prestige, and what treasures of loyalty must have been fooled away by the successors of Louis, before the France of 1715 could be changed into the France of 1793!-Cornhill Magazine.

ON TURKISH WAYS AND TURKISH WOMEN.

PART III.*

THE Muharrem Ghün, or Turkish New Year's Day, is movable, not as regards the Mahommedan calendar, but as respects our year, so that it, and, indeed, all the Turkish religious festivals in rotation, may fall in spring, summer, autumn, or winter. Last year the Muharrem Ghün happened on the 28th of January, and this year it fell on the 16th of last month, and in 1878 it will almost coincide with our own New Year's Day, and will be separated by only a week from that of the Christians of the Greek Church, who ob-

serve Old Style, and are twelve days behind us.

It must be remembered that the old year dies out with the setting sun; the new, therefore, really begins by what corresponds to our New Year's Eve. It is ushered in by a Candil Gedjah, or illumination night. As this is not a great religious festival, and yet nevertheless calls for rejoicing, we see no long texts of fire strung from minaret to minaret, but just the octagonal balcony, or mad'neh, of the mosques beaded all over with small lanterns, or perhaps with colored glass bowls in which lamp-wicks are burning in oil. It may be supposed that this means of lighting does not produce a very brilliant scene; it has an effect, however, sufficiently subdued to

^{*} For Parts I. and II. see numbers for November, 1876, and January, 1877.

that seems to cling about some old ivycovered mosques, and massive walls and shaded hareem windows, overshadowed by tall fir-trees standing up from the echoing courts about the dismal houses of Stamboul. Here the wind moans through the branches on winter nights, when we can not help fancying that every one of these old houses might tell us a hundred tales of wasted, weary lives,—of lives of women who are slaves to the caprices and cruelty of husbands who are their jailors, of servants who are their masters, of women who are more cruel to them than either. Looking out upon the half-lit courts in neighboring houses on other New Year's eves, I have listened to such stories as make the heart leap for hope of sudden deliverance or die down for fear at overtaking calamities, and I have melted with pity for the fate of women who are not only bought like cattle, but afterwards have a life of virtual imprisonment lest they should dare learn to be free.

And then one feels another sort of compassion as one peers into the halfdimness. Is rejoicing alone meant by these feeble lights? Alas, no! The Turk's love for illuminations has a sinister significance, indicative of its opposite -his fear of darkness and of the powers of evil that may lurk about him in obscurity. Superstition - how multiform and how injurious !- is added to the other evils that Mussulman men and women in Turkey have to bear. Their secret horror of darkness is uniform, because they believe it to be peopled with malevolent spirits bent on doing them some bodily mischief. This is why all who can possibly afford it habitually place lights in every room before the twilight has died away; there is a prodigality of these in the houses of the rich, whilst in those of the middle classes and of the poor I have counted the weary, silent minutes as they went by unmarked. even by the ticking of a clock, and pitied a shivering hostess in her vain attempts to be gay in her dull, gloomy-looking sofa, where she trembled amongst her guests at some fancied shade in the distance; or I have sat by the bedside of the sick in some poor house, where almost the necessaries of life would have been wanting but for the gifts of which up into coteries bent on chatting or play-

be in keeping with the sombre romance I had happily been made the almoner, and the one miserable candle has thrown shadows on the walls into which the eyes that were watching for the shadows of death peered with a frightened dismay. When, ah! when shall the light of the new era break through the mists of ignorance, superstition, weakness, and crime, and show men that indeed evil spirits are nearer than they think, even in their own heart's core: that, if they would be delivered from the terrorism of a dominion of evil, they must first be expelled thence: that the disordered imaginations of their own untrained minds are more harmful to them than any personal malignant presence without them could be.

But New Year's Day in Turkey has other and pleasanter superstitions, and to them may be attributed part of the eagerness with which it is looked forward The man or woman who reaches this day in good health and spirits, and with a fairly-filled purse, may hope to be favored especially by Providence in these respects throughout the whole of the coming year. The eve that ushers in the Muharrem Ghün has, oddly enough, only a half share of the Muhar-rem honors. The customary greeting between friends, "May the new year be blessed to you!" begins from this time, but its ceremonious expression as a form of congratulation must be reserved for the morrow. This introductory part of the New Year's Day is, as I said, in point of fact a New Year's Eve, and passed very much like our own, with this difference, that all sad thoughts are thrust carefully out of remembrance, lest any seeming ingratitude should tempt Providence to order hard things for the offender in time to come; thus a grate-ful feeling for any good that has happened in the past year must be cherished above all others. Perhaps it is largely on this account that a show of jollity and amusement prevails for the rest of the evening, when once the women have said their prayers more devoutly than usual and the men have been to mosque two hours after sunset.

Now begins a sort of gaiety that never failed to impress me as a sorry striving after fun. Work is of course for the time put away, and the household breaks friendly reunion amongst themselves, and perhaps call for dancing of a kind that may be designated a sort of rough opera. As this it represents a story in part chanted and in part acted. One of these dances I will try to describe, and it may be called the "Test of Affection." A bashful maiden (she must have long flowing hair and downcast eyes) stands alone upon the scene, by which I must not imply that there is the slightest attempt at stage accessories, the operatic effect depends entirely on the two singers, and the part of the lover is of course sustained by a female character, who in some cases dons male attire. The maiden stands balancing and examining a large colored silk kerchief. A moment after her appearance a dark, brigand-like personage enters from the left, unseen by her, and seems at once struck by her grace and beauty. He advances towards the fair one with gesticulations indicative of admiration, and a burst of song tuned to her praises. At this the girl starts, shields herself behind the kerchief, which she holds before her face as an improvised curtain by the tips of her fingers, and retreats hurriedly, but with graceful, gliding, backward steps. A purruit is kept up for about four stanzas, the lady remaining persistently coy, mute, and never raising her eyes from the floor. In what may be meant in mockery of her contempt, the pursuing lover next displays his kerchief as a screen before his face, and the two, still gaining or losing on each other, continue the mazy circles of the dance, apparently pouting at one another. The success of the acting here depends on the fluttering motion that can be imparted to the waving kerchiefs, and to the lady's hair in imitation of the flight of birds, and to the graceful sway of the body in the course of the moderated chase. Another mood succeeds: impassioned stanzas again break forth, the pathos of the voice of the wooer still contrasting with the girl's silent, scornful indifference, which at last draws bitter tears from her suppliant, who hides his face in his handkerchief and fairly sobs. The lady remains callous notwithstanding, and the lover bethinks himself of the potency of a gift in enticing the heart. The dance

ing. The ladies of the family hold a round and round the apartment till they must be more than giddy. Now, ceasing from flattering words, the swain detaches his watch and chain from his girdle, and quickening his steps so as to overtake his vis-d-vis, he places them unperceived in her waist-belt. On discovering his presents she examines them critically and with disdain, and then gracefully, but with a superb gesture of contempt, slides them along the ground towards the feet of her disconsolate admirer. (This has to be done with care and tact, so that the watch may not be injured; but that is after all but a secondary consideration provided the acting is not spoilt.) The rejected one now divests himself of a gold-embroidered jacket, again advances, and succeeds in flinging it over the shoulders of the lady, but this does not succeed in winning him a regard of kindness; she remains contemptuously distant, and flings the gift from her after turning it about and about in evident admiration of its gorgeousness. He next lays a purse full of gold at her feet, but this too is spurned. In despair the lover now loudly reproaches her for her cruelty, declaring he will no longer endure existence, and drawing a short dagger, he plunges it into his heart and drops dead. At this catastrophe the girl is melted into pity, and falling on her knees beside the body gives way to weeping and lamentations. Her love has been won, but his had to be proved; flattery, luxuries, fortune he was ready to give, but the only true test was wanting-would he give his life? The proof pushed to the utmost remorse ensued, and bitter wailing is the result. Strict tragedy requires that this victim of unrequited love should not only fall down dead, but also "lay himself out," his body being straight and stiff, and his arms and fingers rigid by his side. This makes the comic feature of the scene, and calls forth bursts of laughter that becomes hysterical, as, awakened by the warm repentant tears falling on his eyelids, the power of love brings the spirit of the lover back to its earthly tenement; and he starts up (very much like a spring doll) to fold in his embrace one no longer insensible to the depth of his devotion. Grotesque as the whole representation is, the play has some real pathos in it meanwhile continues, the two going when well dealt with, and is not without also take great pride in performing their parts to the satisfaction of an appreciative audience, amongst whom there are

unsparing critics.

Whenever this very favorite "operadance" is called for, all the slaves of the house will flock to see it, and crowd around doors and passages, mounting on stools to see over each other's heads and witness it. Should there be no dancing to call all together on New Year's evening, then parties of twos and threes will congregate in the large sala, or establish themselves in separate rooms (two or three calphas share one room between them), and amusements of all kinds are in requisition, - backgammon, cards, dominoes, and knuckle-bones, the last a game the Circassians say they play at in their own country. Arab slaves will indulge in their favorite pastime of strumming on the tom-tom, a gourd-like drum, and will keep up a monotonous beating for hours and hours, fully to their own satisfaction, if not to that of other listeners, who would fain be seeking repose, since early rising is a duty of the New Year's morning.

It is considered fortunate to make a prayer in the open air before breaking one's fast, so the most devout amongst the women would hasten to the hareem garden for this purpose before taking coffee or any other refreshment. Not that the prayer carpets would be spread here, but the women would go one by one to stand and offer an informal but heartfelt thanksgiving. Their demeanor when thus engaged is very simple, and they speak as though sure that there is One who is listening to their words. People put on their brightest looks and some holiday dress for this anniversary, and one hears the formula of congratulation, "Muharrem size moubarak oulsun!" in the mouth of every slave as she passes backwards and forwards till everybody has wished everybody a happy new year. It was pleasant to participate in the kindly, cheery feeling, and to have my share of greetings to give and to receive.

The Muharrem is, as I said, one of the occasions on which formal visits are exchanged in Turkish society, but the visits on this day are not so imperative in official circles as those paid on the Baïram feasts and on the anniversary of

a certain dramatic effect; the actresses the Sultan's accession, and take a tinge of friendly courtesy. Sweetmeats called shakir (sugar), veritable bon-bons, white and red (that taste like sweetened colored chalk), are prepared for callers on this day as on the Baïram, and in this the custom somewhat resembles the étrennes of the French Jour de l'an, the invariable bon-bonnière, since on ordinary occasions the sweets offered to visitors are but jam or jelly called tar't'eleh', served in a single cup into which everybody dips

a clean spoon.

It took more than one year for me to understand all the doings on a Turkish New Year's Day. It is curious that the customs which belong to the 1st of April in England and in France belong also to the Muharrem Ghün in Turkey. Practical jokes of all sorts are played off with more or less success. Grown-up calphas and young girls pass each other, their eyes lit up with mischievous intent. The same spirit is abroad in the salaamlik, and the younger boys and girls who were allowed to go in and out of the hareem evidently busied themselves in inventing messages to carry to and fro. Everyone is on the alert not to be tricked into believing his neighbor, and yet there are those who do get get tricked. A message is despatched in a roundabout way to the far, puffy coachman to bring his mistress's carriage in all haste, and when it arrives under the windows the poor man is greeted with bursts of derisive laughter from calphas and eunuchs in ambush behind window-curtains, and the dupe has been caught. (Such a trick can only be played in the absence of the mistress.) Boys will come in breathless haste averring that a house at the end of the street is on fire, and those who run to see are followed with jeering laughter. Stone sugar-plums will be offered with a pretence of innocent friendliness, and a disregard of consequences provoking in the extreme, but not attributable to malice prepense. A calpha will be told that some dear friend or relative from whom the accidents of her life have long parted her is but just arrived to ask for her, and when at the unlooked-for news she gives a start of surprise and a joyful exclamation a rude burst of merriment dashes her delight. All this goes on more or less under the rose, except in the case of the young masters or mistresses, who practise these jokes on each other almost unchecked.

Then I found it was a matter of much importance whom one happened to encounter the first in the day. There were faces lucky and unlucky to look upon; it was a good sign to have chanced upon somebody jumert (generous) or nazig (pleasant). Matronly women will halfshyly yield to this superstition, and take a look through the kaffes into the street, and if their glance should light on one of the lowest servants of the house there will be a deprecating laugh at their expense. This verges somewhat on the popular belief of St. Valentine's Day in England.

But the most characteristic observance of the Muharrem Ghün is one which is very curious, and one which maintains equally amongst men and women, amongst rich and poor. Everybody begs a coin for luck from those of his or her acquaintance who are reckoned to be the most generous, as the more openhanded the giver the more good fortune his gift is sure to bring in the coming year, especially if it be in itself of intrinsic value, or if the coin, though of little value, is new. It becomes quite a matter of necessity that every head of a house, and other chief members of a family, should lay up a store of new coins for this anniversary; rich friends, poor dependents, the halt and the maimed, all come to beg a favor which can not well be refused. Whether or no the givers felt flattered by being called upon to furnish these charms on the favors of fortune I can not say, but they always prepared them willingly.

Although a Ghiaour, I, like the rest, had my court for friendly beggars, and these chiefly amongst well-to-do acquaintances, coins from my purse being in request. In most Turkish houses the lower servants-messengers, gardeners, and saïses-are either Armenians or Christians from one of the provinces: these also come for their coin for luck, so that the custom, as regards these, has come to resemble the giving of our Christmas-boxes. As far as I could observe, these coins were laid by with scrupulous care until the year had run out, when they went to swell the amount in the money-bag and the general quota of

good luck.

During the years I was in Turkey it so happened that the Muharrem Ghün fell in the early spring, about April and March. This gave a feeling of elasticity to those who joined in celebrating it, which we, who welcome the new year in the cold dark days of January, can not know. There is a delicious freshness in looking out upon tender green buds and bright spring blossoms, on blue skies and warm sunshine, and saying to one's self, " This is New Year's Day!" The new spring of life in nature and new startpoint in time have a marvellous unison. I have realised this and seen those about me given up to its pleasant influences, and felt almost sorry we in England have not a movable New Year's Day, or, at least, that it does not happen to fall in spring instead of mid-winter.

Muharrem is the name of the first month of the Mohammedan year. On the tenth day of that month the Moslems hold a festival of several days' duration which is curious in its origin and observances. This is the feast of the Ashura, kept in commemoration of man and beast having been preserved alive in the ark in the days of Noah. Great preparations are made for this feast, large stores of flour, almonds, Indian corn (whole), hazel nuts, walnuts, fustecs (a small Syrian nut boiled in salt water), seeds from the cone of the pine-fir, raisins, wheat, pearlbarley, and other grains and fruits of this nature, are laid in about this time just as we lay in our Christmas stores. The night before the Ashura feast commences the large konaks provide one, two, or three huge cauldrons, and the smaller houses vessels of proportionate size, in which the Ashûra, as the dish is called, is mixed and boiled. It is usually made in the open air, and the cooks would be up all night keeping the fire going and stirring the compound, which requires a good deal of boiling. In large houses a quantity is made at once, that there may be enough to last during the feast, and to give away to friends, neighbors, and the poor.

The dish is served cold, and resembles nothing so much as sweetened gruel, filled with all sorts of cereals-pearlbarley, wheat, and all the grains and fruits already mentioned. It is not a dish to be refused if one makes up one's mind to look on it as half pudding, half dessert, and a mixture of both. But, unhappily, nobody is content with tasting of one dish only. By no means! All round the dining-room stand testas (jugs) of all shapes and sizes, from the handsome huge silver claret-jug pattern to the green glazed delft and unglazed sand-colored earthenware, but all are invariably tied up in green gauze (as all presents are, and as are the little trays of sweetmeats, and cakes, and oranges which likewise pour into large houses on the Muharrem Ghün). Each testa is a present from a different house, and all contain compounds varying according to the receipt which each house has chosen to adopt. The Ashûra dishes, then, are as various as are traditional receipts for Christmas pudding and mince-pies in English households. We, at least, are content to taste of one set of mince-pies only at our dinner, however much faith we may attach to the popular superstition that we get one happy month for every set of which we partake. Turkish women seem to hold the same sort of superstition, and to wish to assure all their chances at once, for they taste of one dish after another and try their relative merits in a way which would be impossible to our palates!

All the slaves of a household are plentifully supplied with Ashûra during the days the feast lasts; large quantities of this food are also sent to poorer neighbors, and beggars bring their earthen vessels to the kitchens of the rich to be filled. At the same time those of the poorer classes who can at all afford to make the dish do not fail to offer some to their patrons and their personal friends. There is, indeed, a common interchange of civilities at this time between persons of all ranks, a tacit acknowledgment that all men stand on one footing of equality as regards our need of food to

sustain life. This recognition is implied by the traditional origin of the festival. The Mohammedans say that when Noah opened the window of the ark the first time to send forth the raven, the rain fell upon the loose grains of various sorts which had become mixed on the floor of the granary; and that whilst Noah's heart was failing him because the dove returned and found no resting place, the seeds, unseen by Noah, were sending tender

green shoots to give him hope that grain should yet again grow on the earth to renew and sustain life for all flesh; and this cheering sight he discovered when he was beginning to be in despair. There would seem to be some tradition that the family in the ark ate of these sodden grains during the last days of their stay in this place of refuge, which was, as we remember, uncovered to the light of heaven "in the first month, on the first day of the month." It seems to be on this account that the Mohammedan festival is observed during the

first month of their year.

I witnessed once or twice a strange and rare dance that I did not at the time connect with the Ashûra feast or with the story of the animals saved in the Ark, but which I now imagine had its origin in that. Several girls join in it, keeping a circle, sometimes holding hands, sometimes dancing apart, but all moving in unison to the sound of their own voices, singing a lyrical accompaniment to the clashing of castanets and other instruments of the musicians, who usually sit in a semicircle opposite the audience, whilst the dancing or play goes on in the middle of the room. girls either move round in a circle, or retreat and advance, their movements being uncertain and regulated by the leader-ousta-or professor. At the end of every stanza comes a chorus, during which the dancers fall on their knees, stretch their necks out to the greatest possible extent, and all together imitate the cry of some animal—the bleating of the sheep, or cooing of the dove. At one chorus the girls have to bring the crown of the head on the floor, and with one jerk send their long hair out towards the centre of the circle, like so many spokes of a wheel: this seemed to mean diving; at another part they crouch on knees and elbows, croak like frogs, and make short leaps under such difficulties as delight to the utmost any juvenile lookers-on. This representation is a long one, full of exaggerated movement, and must greatly fatigue the performers. It is meant to represent either the story of the Ark or that of the Creation.

The Mahometan faith has embodied many traditions of the Jews and stories from the Old Testament. Mussulmans have a very special reverence for the rainbow as an actual renewal, whenever it appears, of the promise of God not again to destroy the earth at any time. Their faith in it as a distinct sign to them is all the more vivid from their being in most cases quite ignorant of the natural causes which produce the rainbow; in such things they are, for the most part, like simple untaught children, not looking for the physical causes of the phenomena of Nature, but attributing the latter to some unseen power in the region of the supernatural. The popular belief amongst the ignorant classes in Turkey respecting the cause of an eclipse is an instance of this. To the ordinary Turkish mind the darkened luminary is being attacked by some evil spirit clambering over it, endeavoring to quench its brightness, and threatening its very existence. Never shall I forget my extreme astonishment, one still winter evening, to hear a sudden firing of guns and a running backwards and forwards in the streets, with shouting and noise, and to discover that all this excitement was occasioned by the people having perceived that the moon was getting darkened. The monster was at its fell work once more, and must be frightened off! So those who had them brought guns, and discharged volleys of shot in the direction of the helpless victim, and to make the defence more effective the Imâms also discharged their fire-arms, with the same aim, from the balconies of the minarets. The struggle was watched with intense interest by men and boys and poor women crowding below, and by ladies and slaves, who witnessed these proceedings from the hareem windows; and the triumph and relief were great when the pious invectives and righteous missiles of the Imâms were found to have so far wrought terror in the vampire that it began slowly to relax its hold on its prey, and the moon gradually regained its effulgence. Complacent ejaculations of victory followed exclamations of dismay, and prayers of thanksgiving went forth from many hearts that had been beating with terror.

I found myself almost unable to realise such a state of ignorance and superstition as could make this perturbation and horror possible on such an occasion. I it; the men treated it either as a joke or the last chapter but one of the Koran

were reticent, evidently holding the custom as a part of their traditions not to be interfered with; the women were generally fully under the influence of the belief, shrugging their shoulders and averring, "It must be so, because the Khodjah tells us so." I took some of them on one side and demonstrated the causes of the eclipses by the help of my lamp and two oranges, and was rewarded after one or two essays by seeing very intelligent glances of comprehension pass between the calphas who composed my audience. "Aman! bou né gheurtchek, Cocona?" (Well, now, is that really true, lady?") they would say to me for days after, as they came about me, bringing coffee or offering other little services; and I felt of what infinite use simple practical teaching would be to these benighted women.

As to my pupil, she was simply ashamed that I should know anything of this, and often tried to prevent my learning too much about her country people; but when she found I had made a discovery involving some popular superstition, she would condescend to put it to me in the best light it would bear, and always fell back on her last defence, "You know, if our religion teaches us that, we cannot set ourselves against it."

"By all means let religious and superstitious beliefs hold a place apart in your minds," was the only possible rejoinder; "but at least try to get common-sense notions of scientific truths as the very first ground-work of anything like real education." And on that understanding we made a compromise on the question, Does the sun revolve round the earth, or the earth around the sun? The great central truth of mathematical astronomy, as regards our universe, is no doubt believed in by a few enlightened Turks, but it is one which can only be received with great difficulty by the bulk of the people. There are two terms which render the verb "to eclipse;" karartmak, to black-en, used by the common people, and guétchmek, to pass; whilst gunech toutoulmace, ai toutoulmace, mean the "catching" of the sun, the "catching" of the moon together, and khousous, eclipse, refers, I believe, to the passing the ecliptic. Whatever may be implied in these terms, questioned both men and women about it does not do away with the fact that in

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there is a special prayer to be preserved from the mischief of the moon when she is eclipsed. And this and the last chapter are constantly repeated by Mussulmans as a sure preservative against magical lunar influences, evil spirits, and the

powers of darkness.

The Crescent is not a chance representation or symbol of the Mohammedan faith; the new moon is inseparably connected in the Mussulman mind with special acts of devotion; its appearance is watched for with eager expectancy, and the moment the eye lights on the slight thread of silver in the western twilight it remains fixed there whilst prayers of thanksgiving and praise are offered, the hands being held up by the face, the palms upward and open, and afterwards passed three times over the visage, the gaze still remaining immovable. The eyes are snatched off, if possible, to be turned straight on some "lucky" face or precious object. A fond mother will send for her child to be near at hand before she takes her first look at the new moon, and as she concludes her prayer she will look into its eyes and kiss it: but not its eye-lids; that would be a sure sign that the two would shortly be parted. Favorite slaves would cover their faces till they could find the young and beautiful princess, and then, as they looked into her eyes, would make their apology, which was sure to be accepted. I was in request for the same purpose, and one room I inhabited, in the heart of Stamboul, was besieged at the new moon by those who held the superstition that it was unlucky to see it through glass, and who flocked to my three windows because they had no kaffès, and could be thrown up (for they looked into a narrow court, and could not be seen from the street). I could not find it in my heart to rebuff these poor girls, whilst I smiled at their superstitious observances; and I gave permission to relay after relay of those who asked leave to station themselves at my windows and look straight from the moon into my face. "Who can bring us better luck than you?" they would say; "you wish good to every one, and you are not a Slave."

At the Equinox the Turks hold a festival for the inauguration of spring. How far it is a religious festival I cannot A sudden desire for activity, for change

say; it seemed to me to be observed quite simply, with social rejoicings and holiday feeling, such as mark New Year's Day amongst us. In March people are still in their town houses in Stamboul, but if the day is fine they are not content to let it pass without making an excursion into the country. The Turkish quarter of the town, when the season is sufficiently advanced, is very beautiful when one gets, as I did, a bird's-eye view of its many gardens decked in spring green; it has indeed hardly the appearance of a town, but of one immense garden, in which grow up picturesquely tumble-down houses, ivy-clad walls, domecovered mosques, and shaft-like minarets; whilst to the west lies the Sea of Marmora, calm as a lake and bright as a mirror in the clear morning light. Seen from the narrow, dusty streets, a visitor to Stamboul at this season knows nothing of its loveliness, and from few of the houses have the inhabitants so extensive a view as that which fortunately fell to my lot. It has often indemnified me for a residence on that side of the Golden Horn.

At the Ev'vel' Bahar, or Spring-tide, all the Turks seem to participate in a certain feeling of all egresse. "To-morrow it will be spring!" they say, as they hasten to make preparations for passing a few days at the yali (sea-side house), or kiosk, or tchifllik. I came to regard March the 21st as a day on which a sudden flitting might be looked for, and was careful to have my own packages ready at a moment's notice, for the no-madic habits of the Turks cling to them to this day, and urge them to sudden change of place and scene. For some long time they will remain under the influence of a contemplative mood, quite content in their enclosed houses, provided they are seated cross-legged on a soft divan, their rosary in one hand and the jasmin rod of their long pipe in the other; seated thus, men and women seem to make it the business of existence to reflect on life in general with a sublime indifference to everything in particular. This may be a very pleasant way of passing one's time, but the most indolent and indifferent must sooner or later grow weary of it. And that is what actually hapof scene, for life in the open air, comes upon them. As few of them have any busy occupation in the way of trade or art, this sudden impulse to be employed finds vent for the most part in "moving" -the making up of effects into square bundles (large and small bogtchas, or silk covers, are always kept ready for this purpose)—and in going off out of the circumscribed space of hareem or salaamlik to some almost empty country house, where they establish themselves for a few days, with the barest necessaries of life, and pass their time in walking or riding on the hill sides, or in their gardens. Turkish women are passionately fond of flowers, and it is cruel that the circumstances of their lives withhold from them, for the most part, the innocent pleasure and healthful recreation of cultivating them themselves; till about four o'clock in the afternoon the women of the house in which I was remained under lock and key, and had not the liberty to go into their own gardens. The rigor of these restrictions is somewhat relaxed at the Ev'vel' Bahar, and people either go out visiting or receive friends at their own house. This brings in quite another system of hospitality than any we could tolerate, since one may have a whole family-mothers, daughters, children, babies, slaves-quartered on one in the most unexpected way, if once the affliction of ennui has seized them at

Of all days in the year the first morning of spring must be honored by early rising and an earnest spirit of gratitude for existence. With day-break or soon after, the faithful Mussulman will hasten to spread his hands abroad under the morning sky; if a light spring rain should happen to be falling at the time, it is not to be avoided, but welcomed and praised as a source of the earth's fertility. I was one of a riding party, made on the occasion of the Ev'vel' Bahar, when we were caught in a heavy shower, and glad to seek shelter under some fine trees, at the very door of one of the Sultan's kiosks, on the road below Tchamlidjah Teppesee, a hill famous for an extensive but distant view of Stamboul, Galata, and the Golden Horn, whilst the Princes Islands in the Marmora lie to the left and the Bosphorus

glistens to the right. The rain poured down in a joyous, tumultuous way, and filled the valley with a silvery mist-like vapor rising from the warm earth. In such rain one was not likely to reach home without a thorough wetting; but the prospect made nobody gloomy. Content beamed on the faces of the effendis, who were snugly ensconced on wooden stools under broad umbrellas. sipping coffee-on those of the kahvégees, who were running to and fro in the rain, and could scarcely keep their sputtering fire alight-on the faces of the itinerant shakirgee, whose light tray of sweetmeats was getting deluged with rain-water—on that of the beghirgee, whose hope of being hired was on the wane. One came here and there on groups of khauums dripping wet, yashmaks and all, trying to shelter themselves under the thick holly-bushes of the hedges; yet they too repressed every expression of discomfort and annoyance, because this was the Ev'vel' Bahar, and all wore smiling, grateful looks, uttering from time to time ejaculations of thanksgiving and praise.

One of the Turkish practices at Spring-The hour and mintide is very curious. ute and second at which the sun crosses the equator are strictly calculated, and this instant has to be observed in a special manner. All the persons of a household must be ready to partake at the given moment of a compound which is supposed to insure them health for the next twelve months. The medicine, or charm, or whatever it may be, is brought into the houses with some ceremony; it is in small round glasses, something like finger-glasses with a cover, that are tied up in green gauze, sealed and labeled with a huge heart-shaped label bearing directions in gilt letters as to the precise instant at which the seal should be broken and those standing by should dip their spoons in and eat to the health of body and mind. The preparation looks remarkably like small garnet beads sticking together in uneven blocks, and has a dark crystallised appearance. I was told one ingredient was the flower of the aloes that blooms but once in a hundred years, and that the name of the compound is Nev'rooze-ce-ah. Watches had been set with the greatest exactitude over-night, and were placed with the jar and spoons on little trays in every room, and one was brought to mine also, where a few visitors congregated to partake with me. The taste, if I remember 1872.—Cornhill Magazine. rightly, was sweet but slightly acrid, and

If the second second section is a second sec SUNS IN FLAMES.

BY RICHARD A. PROCTOR, B.A., F.R.S.

arrived of a catastrophe the effects of of the Lord coming 'as a thief in the which must in all probability have been night; in the which the heavens shall disastrous, not to a district, or a country, pass away with a great noise, and the or a continent, or even a world, but to a elements shall melt with fervent heat, the whole system of worlds. The catas- earth also and the works that are therein trophe happened many years ago-prob- being burned up;' though I imagine the ably at least a hundred—yet the messen- apostle would have been scarce prepared ger who brought the news has not been to admit that the earth was in danger idle on his way, but has sped along at a from a solar conflagration. Indeed, acrate which would suffice to circle this cording to another account, the sun was earth eight times in the course of a sec- to be turned into darkness and the moon ond. That messenger has had, however, into blood, before that great and notable to traverse millions of millions of miles, and only reached our earth last November. The news he brought was that a sun like our own was in conflagration; and on a closer study of his message something was learned as to the nature of the conflagration, and a few facts (somewhat interesting to ourselves) whether our own sun is likely to undergo a similar mishap at any time. What would happen if he did, we know already. The sun which has just met with this disaster-that is, which so suffered a few generations ago-blazed out for a time with several hundred times its former lustre. If our sun were to increase as greatly in light and heat, the creatures on the side of our earth turned towards him at the time would be destroyed in an instant. Those on the dark or night hemisphere would not have to wait for their turn till the earth, by rotating, carried them into view of the destroying sun. In much briefer space the effect of his new fires would be felt all over the earth's surface. The heavens would be dissolved and the elements would melt with fervent heat. In fact no description of such a catastrophe, as affecting the night half of the earth, could possibly be more effective and po-NEW SERIES .- VOL. XXV., No. 5

WITHIN the last few weeks news has etical than St. Peter's account of the day day of the Lord came-a description corresponding well with solar and lunar eclipses, the most noteworthy 'signs in the heavens,' but agreeing very ill with the outburst of a great solar conflagration.

Before proceeding to inquire into the tending to throw light on the question singular and significant circumstances of the recent outburst, it may be found interesting to inquire briefly into the records which astronomy has preserved of similar catastrophes in former years. These may be compared to the records of accidents on the various railway lines in a country or continent. Those other suns which we call stars are engines working the mighty mechanism of planetary systems, as our sun maintains the energies of our own system; and it is a matter of some interest to us to inquire in how many cases, among the many suns within the range of vision, destructive explosions occur. We may take the opportunity, later, to inquire into the number of cases in which the machinery of solar systems appears to have broken

> The first case of a solar conflagration on record is that of the new star observed by Hipparchus some 2,000 years ago. In his time, and indeed until quite recently, an object of this kind was called

a new star, or a temporary star. But we now know that when a star makes its appearance where none had before been visible, what has really happened has been that a star too remote to be seen has become visible through some rapid increase of splendor. When the new splendor dies out again, it is not that a star has ceased to exist; but simply that a faint star which had increased greatly in lustre has resumed its original condition. Hipparchus's star must have been a remarkable object, for it was visible in full daylight, whence we may infer that it was many times brighter than the blazing Dog-star. It is interesting in the history of science, as having led Hipparchus to draw up a catalogue of stars the first on record. Some moderns, being sceptical, rejected this story as a fiction; but Biot examining Chinese Chronicles * relating to the times of Hipparchus, finds that in 134 B.C. (about nine years before the date of Hipparchus's catalogue) a new star was recorded as having appeared in the constellation Scorpio.

The next new star (that is, stellar conflagration) on record is still more interesting, as there appears some reason for believing that before long we may see another outburst of the same star. In the years 945, 1264, and 1572, brilliant stars appeared in the region of the heavens between Cepheus and Cassiopeia. Sir J. Herschel remarks, that, 'from the imperfect account we have of the places of the two earlier, as compared with that of the last, which was well determined, as well as from the tolerably near coincidence of the intervals of their appearance, we may suspect them, with Good-

ricke, to be one and the same star, with a period of 312 or perhaps of 156 years.' The latter period may very reasonably be rejected, as one can perceive no reason why the intermediate returns of the star to visibility should have been overlooked, the star having appeared in a region which never sets. It is to be noted that, the period from 945 to 1264 being 319 years, and that from 1264 to 1572 only 308 years, the period of this star (if Goodricke is correct in supposing the three outbursts to have occurred in the same star) would seem to be diminishing. At any time, then, this star might now blaze out in the region between Cassiopeia and Cepheus, for more than 304 years have already passed since its last outburst.

As the appearance of a new star led Hipparchus to undertake the formation of his famous catalogue, so did the appearance of the star in Cassiopeia, in 1572, lead the Danish astronomer Tycho Brahe to construct a new and enlarged catalogue. (This, be it remembered, was before the invention of the telescope.) Returning one evening (November 11, 1572, old style) from his laboratory to his dwelling-house, he found, says Sir J. Herschel, 'a group of country people gazing at a star, which he was sure did not exist an hour before. This was the star in question.'

The description of the star and its various changes is more interesting at the present time, when the true nature of these phenomena is understood, than it was even in the time when the star was blazing in the firmament. It will be gathered from that description and from what I shall have to say further on about the results of recent observations on less splendid new stars, that, if this star should reappear in the next few years, our observers will probably be able to obtain very important in-formation from it. The message from it will be much fuller and more distinct than any we have yet received from such stars, though we have learned quite enough to remain in no sort of doubt as to their general nature.

The star remained visible, we learn, about sixteen months, during which time it kept its place in the heavens without the least variation. 'It had all the radiance of the fixed stars, and twinkled like

^{*} Chinese chronicles contain other references to new stars. The annals of Ma-touan-lin, which contain the official records of remarkable appearances in the heavens, include some phenomena which manifestly belong to this class. Thus they record that in the year 173 a star appeared between the stars which mark the hind feet of the Centaur. This star remained visible from December in that year until July in the next (about the same time as Tycho Brahe's and Kepler's new stars, presently to be described). Another star, assigned by these annals to the year 1011, seems to be the same as a star referred to by Hepidannus as appearing A.D. 1012. It was of extraordinary brilliancy, and remained visible in the southern part of the heavens during three months. The annals of Ma-touan-lin assign to it a position low down in Sagittarius.

them; and was in all respects like Sirius, except that it surpassed Sirius in brightness and magnitude.' It appeared larger than Jupiter, which was at that time at his brightest, and was scarcely inferior to Venus. It did not acquire this lustre gradually, but shone forth at once of its full size and brightness, 'as if,' said the chroniclers of the time, 'it had been of instantaneous creation.' For three weeks it shone with full splendor, during which time it could be seen at noonday 'by those who had good eyes, and knew where to look for it.' But before it had where to look for it.' been seen a month, it became visibly smaller, and from the middle of December 1572 till March 1574, when it entirely disappeared, it continually diminished in magnitude. 'As it decreased in size, it varied in color, at first its light was white and extremely bright; it then became yellowish; afterwards of a ruddy color like Mars; and finished with a pale livid white resembling the color of Saturn.' All the details of this account should be very carefully noted. It will presently be seen that they are highly characteristic.

Those who care to look occasionally at the heavens to know whether this star has returned to view may be interested to learn whereabouts it should be looked for. The place may be described as close to the back of the star-gemmed chair in which Cassiopeia is supposed to sit-a little to the left of the seat of the chair, supposing the chair to be looked at in its normal position. But as Cassiopeia's chair is always inverted when the constellation is most conveniently placed for observation, and indeed as ninetenths of those who know the constellation suppose the chair's legs to be the back, and vice versa, it may be useful to mention that the star was placed somewhat thus with respect to the straggling W formed by the five chief stars of Cassiopeia. There is a star not very far from the place here indicated, but W rather nearer to the middle angle of the W. This, however, is not a bright star; and cannot possibly be mistaken for the expected visitant. (The place of Tycho's star is indicated in my School Star-Atlas and also in my larger Library Atlas. The same remark applies to both the new stars in the Serpent-Bearer, presently to be described.)

In August 1596 the astronomer Fabricius observed a new star in the neck of the Whale, which also after a time disappeared. It was not noticed again till the year 1637, when an observer rejoicing in the name of Phocyllides Holwarda observed it, and, keeping a watch, after it had vanished, upon the place where it had appeared, saw it again come into view nine months after its disappearance. Since then, it has been known as a variable star with a period of about 331 days, 8 hours. It shines at its brightest as a star of the second magnitude; and it indicates a somewhat singular remissness on the part of the astronomers of former days, that a star shining so conspicuousiy for a fortnight, once in each period of 3318 days, should for so many years have remained undetected. may, perhaps, be thought that, noting this, I should withdraw the objection raised above against Sir J. Herschel's idea that the star in Cassiopeia may return to view once in 156 years, instead of once in 312 years. But there is a great difference between a star which at its brightest shines only as a secondmagnitude star, so that it has twenty or thirty companions of equal or greater lustre above the horizon along with it, and a star which surpasses three fold the splendid Sirius. We have seen that even in Tycho Brahe's day, when probably the stars were not nearly so well known by the community at large, the new star in Cassiopeia had not shone an hour before the country people were gazing at it with wonder. Besides, Cassiopeia and the Whale are constellations very different in position. The familiar stars of Cassiopeia are visible on every clear night, for they never set. The stars of the Whale, at least of the part to which the wonderful variable star belongs, are below the horizon during rather more than half the twenty-four hours; and a new star there would be noticed, probably (unless of exceeding splendor), if it chanced to appear during that part of the year when the Whale is high above the horizon between eventide and midnight, or in the autumn and early winter.

It is a noteworthy circumstance about the variable star in the Whale, deservedly called Mira, or the Wonderful, that it does not always return to the same degree of brightness. Sometimes it has been a very bright second-magnitude star when at its brightest, at others it has barely exceeded the third magnitude. Hevelius relates that during the four years between October 1672 and December 1676, Mira did not show herself at all! As this star fades out, it changes in color from white to red.

Towards the end of September 1604, a new star made its appearance in the constellation Ophiuchus, or the Serpent-Bearer. Its place was near the heel of the right foot of 'Ophiuchus large.' Kepler tells us that it had no hair or tail, and was certainly not a comet. Moreover, like the other fixed stars, it kept its place unchanged, showing unmistakably that it belonged to the stardepths, not to nearer regions. 'It was exactly like one of the stars, except that in the vividness of its lustre, and the quickness of its sparkling, it exceeded anything that he had ever seen before. It was every moment changing into some of the colors of the rainbow, as yellow, orange, purple, and red; though it was generally white when it was at some distance from the vapors of the horizon.' In fact, these changes of color must not be regarded as indicating aught but the star's superior brightness. Every very bright star, when close to the horizon, shows these colors, and so much the more distinctly as the star is the brighter. Sirius, which surpasses the brightest stars of the northern hemisphere full four times in lustre, shows these changes of color so conspicuously that they were regarded as specially characteristic of this star, insomuch that Homer speaks of Sirius (not by name, but as the star of autumn) shining most beautifully when laved of ocean's wave—that is, when close to the horizon. And our own poet, Tennyson, following the older poet, sings how

> the fiery Sirius alters hue, And bickers into red and emerald.

The new star was brighter than Sirius, and was about five degrees lower down, when at its highest above the horizon, than Sirius when he culminates. Five degrees being equal to nearly ten times the apparent diameter of the moon, it will be seen how much more favorable the conditions were in the case of Kepler's star for those colored scintillations

which characterised that orb. Sirius never rises very high above the horizon. In fact, at his highest (near midnight in winter, and, of course, near midday in summer) he is about as high above the horizon as the sun at mid-day in the first week in February. Kepler's star's greatest height above the horizon was little more than three-fourths of this, or equal to about the sun's elevation at midday on January 13 or 14 in any year.

Like Tycho Brahe's star, Kepler's was brighter even than Jupiter, and only fell short of Venus in splendor. It preserved its lustre for about three weeks, after which time it gradually grew fainter and fainter until some time between October 1605 and February 1606, when it disappeared. The exact day is unknown, as during that interval the constellation of the Serpent-Bearer is above the horizon in the daytime only. But in February 1606, when it again became possible to look for the new star in the nighttime, it had vanished. It probably continued to glow with sufficient lustre to have remained visible, but for the veil of light under which the sun concealed it, for about sixteen months altogether. In fact, it seems very closely to have resembled Tycho's star, not only in appearance and in the degree of its greatest brightness, but in the duration of its vis-

In the year 1670 a new star appeared in the constellation Cygnus, attaining the third magnitude. It remained visible, but not with this lustre, for nearly two years. After it had faded almost out of view, it flickered up again for a while, but soon after it died out, so as to be entirely invisible. Whether a powerful telescope would still have shown it is uncertain, but it seems extremely probable. It may be, indeed, that this new star in the Swan is the same which has made its appearance within the last few weeks; but on this point the evidence is uncertain.

On April 28, 1848, Mr. Hind (Superintendent of the Nautical Almanac, and discoverer of ten new members of the solar system) noticed a new star of the fifth magnitude in the Serpent-Bearer, but in quite another part of that large constellation than had been occupied by Kepler's star. A few weeks later, it rose to the fourth magnitude. But afterwards its light diminished until it became invisible to ordinary eyesight. It did not vanish utterly, however. It is still visible with telescopic power, shining as a star of the eleventh magnitude, that is, five magnitudes below the faintest star discernible with the unaided eye.

This is the first new star which has been kept in view since its apparent creation. But we are now approaching the time when it was found that as so-called new stars continue in existence long after they have disappeared from view, so also they are not in reality new, but were in existence long before they became visible to the paked every

came visible to the naked eye.

On May 12, 1866, shortly before midnight, Mr. Birmingham, of Tuam, noticed a star of the second magnitude in the Northern Crown, where hitherto no star visible to the naked eye had been known. Dr. Schmidt, of Athens, who had been observing that region of the heavens the same night, was certain that up to 11 P.M., Athens local time, there was no star above the fourth magnitude in the place occupied by the new star. that, if this negative evidence can be implicitly relied on, the new star must have sprung at least from the fourth, and probably from a much lower magnitude, to the second, in less than three hourseleven o'clock at Athens corresponding to about nine o'clock by Irish railway time. A Mr. Barker, of London, Canada, put forward a claim to having seen the new star as early as May 4-a claim not in the least worth investigating, so far as the credit of first seeing the new star is concerned, but exceedingly important in its bearing on the nature of the outburst affecting the star in Corona. It is unpleasant to have to throw discredit on any definite assertion of facts; unfortunately, however, Mr. Barker, when his claim was challenged, laid before Mr. Stone, of the Greenwich Observatory, records so very definite of observations made on May 4, 8, 9, and 10, that we have no choice but either to admit these observations, or to infer that he fell under the delusive effects of a very singular trick of memory. He mentions in his letter to Mr. Stone that he had sent full particulars of his observations on those early dates to Professor Watson, of Ann Arbor University, on May 17; but (again unfortunately) instead of leaving that letter to tell its own story in Professor Watson's hands, he asked Professor Watson to return it to him: so that when Mr. Stone very naturally asked Professor Watson to furnish a copy of this important letter, Professor Watson had to reply, 'About a month ago, Mr. Barker applied to me for this letter, and I returned it to him, as requested, without preserving a copy. I can, however,' he proceeded, 'state positively that he did not mention any actual observation earlier than May 14. He said he thought he had noticed a strange star in the Crown about two weeks before the date of his first observation-May 14-but not particularly, and that he did not recognise it until the 14th. He did not give any date, and did not even seem positive as to identity. . . When I returned the letter of May 17, I made an endorsement across the first page, in regard to its genuineness, and attached my signature. I regret that I did not preserve a copy of the letter in question; but if the original is produced it will appear that my recollection of its contents is correct.' I think no one can blame Mr. Stone, if, on the receipt of this letter, he stated that he had not the 'slightest hesitation' in regarding Mr. Barker's earlier observations as 'not entitled to the slightest credit."

^{*} Still, a circumstance must be mentioned which tends to show that the star may have been visible a few hours earlier than Dr. Schmidt supposed. Mr. M. Walter, surgeon of the 4th regiment, then stationed in North India, wrote (oddly enough, on May 12, 1867, the first anniversary of Mr. Birmingham's discovery) as follows to Mr. Stone:—'I am certain that this same conflagration was distinctly perceptible here at least six hours earlier. My knowledge of the fact came about in this wise. The night of the 12th of May last year was exceedingly sultry, and about eight o'clock on that evening I got up from the teatable and rushed into my garden to seek a cooler atmosphere. As my door opens to-wards the east, the first object that met my view was the Northern Crown. My attention was at once arrested by the sight of a strange star outside the crown' (that is, outside the circlet of stars forming the diadem, not outside the constellation itself). The new star 'was then certainly quite as bright—I rather thought more so—as its neighbor Alphecca,' the chief gem of the Crown. 'I was so much struck with its appearance, that I exclaimed to those indoors," Why, here is a new comet ". He made a diagram of the constellation, showing the place of the new star correctly. Un-

evening of May 13, Schmidt of Athens discovered it independently, and a few hours later it was noticed by a French engineer named Courbebaisse. Afterwards, Baxendell, of Manchester, and others, independently saw the star. Schmidt, examining Argelander's charts of 324,000 stars (charts which I have had the pleasure of mapping in a single sheet) found that the star was not a new one, but had been set down by Argelander as between the ninth and tenth magnitudes. Referring to Argelander's list, we find that the star had been twice observed-viz., on May 18, 1855, and on March 31, 1856.

Birmingham wrote at once to Mr. Huggins, who, in conjunction with the late Dr. Miller, had been for some time engaged in observing stars and other celestial objects with the spectroscope. These two observers at once directed their telescope armed with spectroscopic adjuncts—the telespectroscope is the pleasing name of the compound instrument-to the new-comer. The result was rather startling. It may be well, however, before describing it, to indicate in a few words the meaning of various kinds of spectroscopic evidence.

The light of the sun, sifted out by the spectroscope, shows all the colors but not all the tints of the rainbow. It is spread out into a large rainbow-tinted streak, but at various places (a few thousand) along the streak there are missing tints; so that in fact the streak is crossed by a multitude of dark lines. We know that these lines are due to the absorptive action of vapors existing in the atmosphere of the sun, and from the position of the lines we can tell what the vapors are. Thus, hydrogen by its absorptive action produces four of the bright lines. The vapor of iron is there, the vapor of

It may be fairly taken for granted that sodium, magnesium, and so on. Again, the new star leapt very quickly, if not we know that these same vapors, which, quite suddenly, to its full splendor. by their absorptive action, cut off rays Birmingham, as we have seen, was the of certain tints, emit light of just those first to notice it, on May 12. On the tints. In fact, if the glowing mass of the sun could be suddenly extinguished, leaving his atmosphere in its present intensely heated condition, the light of the faint sun which would thus be left us would give (under spectroscopic scrutiny) those very rays which now seem wanting. There would be a spectrum of multitudinous bright lines, instead of a rainbow-tinted spectrum crossed by multitudinous dark lines. It is, indeed, only by contrast that the dark lines appear dark, just as it is only by con-trast that the solar spots seem dark. Not only the penumbra but the umbra of a sunspot, not only the umbra but the nucleus, not only the nucleus but the deeper black which seems to lie at the core of the nucleus, shine really with a lustre far exceeding that of the electric light, though by contrast with the rest of the sun's surface the penumbra looks dark, the umbra darker still, the nucleus deep black, and the core of the nucleus jet black. So the dark lines across the solar spectrum mark where certain rays are relatively faint, though in reality intensely lustrous. Conceive another change than that just imagined. Conceive the sun's globe to remain as at present, but the atmosphere to be excited to many times its present degree of light and splendor: then would all these dark lines become bright, and the rainbowtinted background would be dull or even quite dark by contrast. This is not a mere fancy. At times, local disturbances take place in the sun which produce just such a change in certain constituents of the sun's atmosphere, causing the hydrogen, for example, to glow with so intense a heat that, instead of its lines appearing dark, they stand out as bright lines. Occasionally, too, the magnesium in the solar atmosphere (over certain limited regions only, be it remembered) has been known to behave in this manner. It was so during the intensely hot summer of 1872, insomuch that the Italian observer Tacchini, who noticed the phenomenon, attributed to such local overheating of the sun's magnesium vapor the remarkable heat from which we then for a time suffered.

fortunately, Mr. Walter does not state why he is so confident, a year after the event, that it was on the 12th of May, and not on the 13th, that he noticed the new star. If he fixed the date only by the star's appearance as a secondmagnitude star, his letter proves nothing; for we know that on the 13th it was still shining as brightly as Alphecca, though on the 14th it was perceptibly fainter.

Now the stars are suns, and the spectrum of a star is simply a miniature of tense glow of the hydrogen was caused the solar spectrum. Of course, there are characteristic differences. One star has more hydrogen, at least more hydrogen at work absorbing its rays, and thus has the hydrogen lines more strongly marked than they are in the solar spectrum. Another star shows the lines of various metals more conspicuously, showing that the glowing vapors of such elements, iron, copper, mercury, tin, and so forth, either hang more densely in the star's atmosphere than in our sun's, or, being cooler, absorb their special tints more effectively. But speaking generally, a stellar spectrum is like the solar spec-There is the rainbow-tinted streak, which implies that the source of light is glowing solid, liquid, or highly compressed vaporous matter, and athwart the streak there are the multitudinous dark lines which imply that around the glowing heart of the start here are envelopes of relatively cool vapors.

We can understand, then, the meaning of the evidence obtained from the new star in the Northern Crown.

In the first place, the new star showed the rainbow-tinted streak crossed by dark lines, which indicated its sun-like nature. But, standing out on that rainbow-tinted streak as on a dark background, were four exceedingly bright lines-lines so bright, though fine, that clearly most of the star's light came from the glowing vapors to which these belonged. Three of the lines belonged to hydrogen, the fourth was not identified with any known line.

Let us distinguish between what can certainly be concluded from this remarkable observation, and what can only be inferred with a greater or less degree of probability.

It is absolutely certain that when Messrs. Huggins and Miller made their observation (by which time the new star had faded from the second to the third magnitude), enormous masses of hydrogen around the star were glowing with a heat far more intense than that of the star itself within the hydrogen envelope. It is certain that the increase in the star's light, rendering the star visible which before had been far beyond the range of ordinary eyesight, was due to the abnormal heat of the hydrogen surrounding that remote sun.

But it is not so clear whether the inby combustion or by intense heat without combustion. The difference between the two causes of increased light is important; because on the opinion we form on this point must depend our opinion as to the probability that our sun may one day experience a similar catastrophe, and also our opinion as to the state of the sun in the Northern Crown, after the outburst. To illustrate the distinction in question, let us take two familiar cases of the emission of light. A burning coal glows with red light, and so does a piece of iron placed in a coal fire. But the coal and the iron are undergoing very different processes. The coal is burning, and will presently be consumed; the iron is not burning (except in the sense that it is burning hot, which means only that it will make any combustible substance burn which is brought into contact with it), and will not be consumed though the coal fire be maintained around it for days and weeks and months. So with the hydrogen flames which play all the time over the surface of our own sun. They are not burning like the hydrogen flames which are used for the oxyhydrogen lantern. Were the solar hydrogen so burning, the sun would quickly be extinguished. They are simply aglow with intensity of heat, as a mass of red-hot iron is aglow; and, so long as the sun's energies are maintained, the hydrogen around him will glow in this way without being consumed. As the new fires of the star in the Crown died out rapidly, it is possible that in their case there was actual combustion. On the other hand, it is also possible, and perhaps on the whole more probable, that the hydrogen surrounding the star was simply set glowing with increased lustre owing to some cause not as yet ascertained.

Let us see how these two theories have been actually worded by the students of science themselves who have maintained

'The sudden blazing, forth of this star,' says Mr. Huggins, 'and then the rapid fading away of its light, suggest the rather bold speculation that in consequence of some great internal convulsion, a large volume of hydrogen and other gases was evolved from it, the hydrogen, by its combination with some other element,' in other words, by burning, 'giving out the light represented by the bright lines, and at the same time heating to the point of vivid incandescence the solid matter of the star's surface. 'As the liberated hydrogen gas became exhausted' (I now quote not Huggins's own words, but words describing his theory in a book which he has edited)' the flame gradually abated, and, with the consequent cooling, the star's surface became less vivid, and the star returned to its original condition.'

On the other hand, the German physicists, Meyer and Klein, consider the sudden development of hydrogen, in quantities sufficient to explain such an outburst, exceedingly unlikely. have therefore adopted the opinion, that the sudden blazing out of the star was occasioned by the violent precipitation of some mighty mass, perhaps a planet, upon the globe of that remote sun, 'by which the momentum of the falling mass would be changed into molecular motion, or in other words into heat and light,' It might even be supposed, they urge, that the star in the Crown, by its swift motion, may have come in contact with one of the star clouds which exist in large numbers in the realms of space. Such a collision would necessarily set the star in a blaze and occasion the most vehement ignition of its hydrogen.'

Fortunately, our sun is safe for many millions of years to come from contact from any one of its planets. The reader must not, however, run away with the idea that the danger consists only in the gradual contraction of planetary orbits sometimes spoken of. That contraction, if it is taking place at all, of which we have not a particle of evidence, would not draw Mercury to the sun's surface for at least ten million millions of years. The real danger would be in the effects which the perturbing action of the larger planets might produce on the orbit of Mercury. That orbit is even now very eccentric, and must at times become still more so. It might, but for the actual adjustment of the planetary system, become so eccentric that Mercury could not keep clear of the sun; and a blow from even small Mercury (only weighing, in fact, 390 millions of millions of millions of tons), with a velocity of some

300 miles per second, would warm our sun considerably. But there is no risk of this happening in Mercury's case though the unseen and much more shifty Vulcan (in which planet I beg to express here my utter disbelief) might, perchance, work mischief if he really exist-

As for star clouds lying in the sun's course, we may feel equally confident. The telescope assures us that there are none immediately on the track, and we know, also, that, swiftly though the sun is carrying us onwards through space,* many millions of years must pass before he is among the star families towards which he is rushing.

Of the danger from combustion, or from other causes of ignition than those considered by Meyer and Klein, it still remains to speak. But first, let us consider what new evidence has been thrown upon the subject by the observations made on the star which flamed out last November.

The new star was first seen by Professor Schmidt, who has had the good fortune of announcing to astronomers more than one remarkable phenomenon. It was he who discovered in November 1866 that a lunar crater had disappeared, an announcement quite in accordance with the facts of the case. We have seen that he was one of the independent discoverers of the outburst in the Northern Crown, On November 24, at the early hour of 5.41 in the evening (showing that Schmidt takes time by the forelock at his observatory), he noticed a star of the third magnitude in the constellation of the Swan, not far from the tail of that southward-flying celestial bird. He is quite sure that on November 20, the last preceding clear evening, the star was not there. At midnight its light was very yellow, and it was somewhat brighter than the neighboring star Eta Pegasi, on the Flying Horse's southernmost knee (if anatomists will excuse my following the ordinary usage which calls the wrist of the horse's fore-arm the knee). He sent news of the discovery

^{*} The velocity of three or four miles per second inferred by the elder Struve must now be regarded (as I long since pointed out would prove to be the case) as very far short of the real velocity of our system's motion through stellar space.

forthwith to Leverrier, the chief of the Paris observatory; and the observers there set to work to analyse the light of the stranger. Unfortunately, the star's suddenly acquired brilliancy rapidly faded. M. Paul Henry estimated the star's brightness on December 2 as equal only to that of a fifth-magnitude star. Moreover, the color, which had been very yellow on November 24, was by this time 'greenish, almost blue.' On December 2, M. Cornu, observing during a short time when the star was visible through a break between clouds, found that the star's spectrum consisted almost entirely of bright lines. On December 5, he was able to determine the position of these lines, though still much interrupted by clouds. He found three bright lines of hydrogen, the strong (really double) line of sodium, the (really triple) line of magnesium, and two other lines. One of these last seemed to agree exactly in position with a bright line belonging to the corona seen around the sun during total eclipse.

The star has since faded gradually in lustre until, at present, it is quite invisi-

ble to the naked eve.

We cannot doubt that the catastrophe which befell this star is of the same general nature as is that which befell the star in the Northern Crown. It is extremely significant that all the elements which manifested signs of intense heat in the case of the star in the Swan, are characteristic of our sun's outer appendages. We know that the colored flames seen around the sun during total solar eclipse consist of glowing hydrogen, and of glowing matter giving a line so near the sodium line that in the case of a stellar spectrum it would, probably, not be possible to distinguish one from the other. Into the prominences there are thrown from time to time masses of glowing sodium, magnesium, and (but in less degree) iron and other metallic vapors. Lastly, in that glorious appendage, the solar corona, which extends for hundreds of thousands of miles from the sun's surface, there are enormous quantities of some element, whose nature is as yet unknown, showing under spectroscopic analysis the bright line which seems to have appeared in the spectrum of the flaming sun in the Swan.

This evidence seems to me to suggest

that the intense heat which suddenly affected this star had its origin from without. At the same time, I cannot agree with Meyer and Klein in considering that the cause of the heat was either the downfall of a planetary mass on the star, or the collision of the star with a star-cloudlet, or nebula, traversing space in one direction while the star swept onwards in another. A planet could not very well come into final conflict with its sun at one fell swoop. It would gradually draw nearer and nearer, not by the narrowing of its path, but by the change of the path's shape. The path would, in fact, become more and more eccentric; until, at length, at its point of nearest approach, the planet would graze its primary, exciting an intense heat where it struck, but escaping actual destruction that time. The planet would make another circuit, and again graze its sun, at or near the same part of the planet's path. For several circuits this would continue, the grazes not becoming more effective each time, but rather less. The interval between them, however, would grow continually less and less. At last the time would come when the planet's path would be reduced to the circular form, its globe touching its sun's all the way round, and then the planet would very quickly be reduced to vapor, and partly burned up, its substance being absorbed by its sun. But all the successive grazes would be indicated to us by accessions in the star's lustre, the period between each seeming outburst being only a few months at first, and becoming gradually less and less (during a long course of years, perhaps even of centuries), until the planet was finally destroyed. Nothing of this sort has happened in the case of any so-called new

As for the rush of a star through a nebulous mass, that is a theory which would scarcely be entertained by any one acquainted with the enormous distances separating the gaseous star-clouds properly called nebulæ. There may be small clouds of the same sort scattered much more densely through space; but we have not a particle of evidence that this actually is the case. All we certainly know about star-cloudlets suggests that the distances separating them from each other are comparable with those which

separate star from star, in which case the idea of a star coming into collision with a star-cloudlet, and still more the idea of this occurring several times in a century,

is wild in the extreme. On the whole, the theory seems more probable than any of these, that enormous flights of large meteoric masses travel around those stars which thus occasionally break forth in conflagration, such flights travelling on exceedingly eccentric paths, and requiring enormously long periods to complete each circuit of their vast orbits. In conceiving this, we are not imagining anything new. Such a meteoric flight would differ only in kind from meteoric flights which are known to circle around our own sun. I am not sure, indeed, that it can be definitely asserted that our sun has no meteoric appendages of the same nature as those which, if this theory be true, excite to intense periodic activity the suns round which they circle. We know that comets and meteors are closely connected, every comet being probably (many certainly) attended by flights of meteoric masses. The meteors which produce the celebrated November showers of falling stars follow in the track of a comet invisible to the naked eye. May we not reasonably suppose, then, that those glorious comets which have not only been visible but conspicuous, shining even in the day-time, and brandishing round tails which, like that of the 'wonderin heaven, the great dragon,' seemed to 'draw the third part of the stars of heaven,' are followed by much denser flights of much more massive meteors? Now some among these giant comets have paths which carry them very close to our sun. Newton's comet, with its tail a hundred millions of miles in length, all but grazed the sun's globe. The comet of 1843, whose tail, says Sir J. Herschel, 'stretched half-way across the sky,' must actually have grazed the sun, though but lightly, for its nucleus was within 80,000 miles of his surface, and its head was more than 160,000 miles in diameter. And these are only two among the few comets whose paths are known. At any time we might be visited by a comet mightier than either, travelling on an orbit intersecting the sun's surface, followed by flights of meteoric masses enormous in

size and many in number, which, falling

on the sun's globe with the enormous velocity corresponding to their vast orbital range and their near approach to the sun—a velocity of some 360 miles per second—would, beyond all doubt, excite his whole frame, and especially his surface regions, to a degree of heat far ex-

face regions, to a degree of heat far exceeding what he now emits.

We have had evidence of the tremen-

dous heat to which the sun's surface would be excited by the downfall of a shower of large meteoric masses. Carrington and Hodgson, on September 1, 1850, observed (independently) the passage of two intensely bright bodies across a small part of the sun's surface—the bodies first increasing in brightness, then diminishing, then fading away. It is generally believed that these were meteoric masses raised to fierce heat by frictional resistance. Now so much brighter did they appear, or rather did that part of the sun's surface appear through which they had rushed, that Carrington supposed the dark glass screen used to protect the eye had broken, and Hodgson described the brightness of this part of the sun as such that the part shone like a brilliant star on the background of the glowing solar surface. Mark, also, the consequences of the downfall of those two bodies only. A magnetic disturbance affected the whole frame of the earth at the very time when the sun had been thus disturbed. Vivid auroras were seen not only in both hemispheres, but in latitudes where auroras are very seldom witnessed. 'By degrees,' says Sir J. Herschel, 'accounts began to pour in of great auroras seen not only in these latitudes but at Rome, in the West Indies, on the tropics within eighteen degrees of the equator (where they hardly ever appear); nay, what is still more striking, in South America and in Australia-where, at Melbourne, on the night of September 2, the greatest aurora ever seen there made its appearance. These auroras were accompanied with unusually great electro-magnetic disturbances in every part of the world. In many places the telegraph wires struck work. They had too many private messages of their own to convey. At Washington and Philadelphia, in America, the electric signalmen received severe electric shocks. At a station in Norway, the telegraphic apparatus was set fire to; and at Boston, in

North America, a flame of fire followed the comet of 1843, and the great sunthe pen of Bain's electric telegraph, spot which appeared in June 1843. I which writes down the message upon am not sure, however, but that we may chemically prepared paper.' Seeing that regard the very meteors which seem to where the two meteors fell the sun's sur- have fallen on the sun on September 1, face glowed thus intensely, and that the 1859, as bodies travelling in the track of effect of this accession of energy upon our earth was thus well marked at our earth, can it be doubted that a comet, bearing in its train a flight of many millions of meteoric masses, and falling directly upon the sun, would produce an accession of light and heat, whose consequences would be disastrous? When the earth has passed through the richer portions (not the actual nuclei, be it remembered) of meteor systems, the meteors visible from even a single station have been counted by tens of thousands, and it has been computed that millions must have fallen upon the whole earth. These were meteors following in the train of very small comets. If a very large comet followed by no denser a flight of meteors, but each meteoric mass much larger, fell directly upon the sun, it would not be the outskirts but the nucleus of the meteoric train which would impinge upon him. They would number thousands of millions. The velocity of downfall of each mass would be more than 360 miles per second. And they would continue to pour in upon him for several days in succession, millions falling every hour. It seems not improbable that under this tremendous and long-continued meteoric hail, his whole surface would be caused to glow as intensely as that small part whose brilliancy was so surprising in the observation made by Carrington and Hodgson. In that case, our sun, seen from some remote star whence ordinarily he is invisible, would shine out as a new sun, for a few days, while all things living on our earth, and whatever other members of the solar system are the abode of life, would inevitably be destroyed.

The reader must not suppose that this idea has been suggested merely in the attempt to explain outbursts of stars. The following passage from a paper of considerable scientific interest by Professor Kirkwood, of Bloomington, Indiana, a well-known American astronomer, shows that the idea has occurred to him for a very different reason. He speaks

the comet of 1843-just as the November meteors seen in 1867-8-9, &c., until 1872, were bodies certainly following in the track of the telescopic comet of 1866. 'The opinion has been expressed by more than one astronomer,' he says, speaking of Carrington's observation, 'that this phenomenon was produced by the fall of meteoric matter upon the sun's surface. Now, the fact may be worthy of note that the comet of 1843 actually grazed the sun's atmosphere about three months before the appearance of the great sun-spot of the same year. Had it approached but little nearer, the resistance of the atmosphere would probably have brought its entire mass to the solar surface. Even at its actual distance it must have produced considerable atmospheric disturbance. But the recent discovery that a number of comets are associated with meteoric matter, travelling in nearly the same orbits, suggests the inquiry whether an enormous meteorite following in the comet's train, and having a somewhat less perihelion distance, may not have been precipitated upon the sun, thus producing the great disturbance observed so shortly after the comet's perihelion pas-

There are those, myself among the number, who consider the periodicity of the solar spots, that tide of spots which flows to its maximum and then ebbs to its minimum in a little more than eleven years, as only explicable on the theory that a small comet having this period, and followed by a meteor train, has a path intersecting the sun's surface. In an article entitled 'The Sun a Bubble,' which appeared in the 'Cornhill Magazine 'for October 1874, I remarked that from the observed phenomena of sunspots, we might be led to suspect the existence of some as yet undetected comet with a train of exceptionally large meteoric masses, travelling in a period of about eleven years round the sun, and having its place of nearest approach to that orb so close to the solar surface here of a probable connection between that, when the main flight is passing, the

stragglers fall upon the sun's surface. In this case, we could readily understand that, as this small comet unquestionably causes our sun to be variable to some slight degree in brilliancy, in a period of about eleven years, so some much larger comet circling around Mira, in a period of about 331 days, may occasion those alternations of brightness which have been described above. It may be noticed in passing, that it is by no means certain that the time when the sun is most spotted is the time when he gives out least light. Though at such times his surface is dark where the spots are, yet elsewhere it is probably brighter than usual; at any rate, all the evidence we have tends to show that when the sun is most spotted, his energies are most active. It is then that the colored flames leap to their greatest height and show their greatest brilliancy, then also that they show the most rapid and remarka-

ble changes of shape.

Supposing there really is, I will not say danger, but a possibility, that our sun may one day, through the arrival of some very large comet travelling directly towards him, share the fate of the suns whose outbursts I have described above, we might be destroyed unawares, or we might be aware for several weeks of the approach of the destroying comet. Suppose, for example, the comet, which might arrive from any part of the heavens, came from out that part of the star-depths which is occupied by the constellation Taurus-then, if the arrival were so timed that the comet, which might reach the sun at any time, fell upon him in May or June, we should know nothing of that comet's approach: for it would approach in that part of the heavens which was occupied by the sun, and his splendor would hide as with a veil the destroying enemy. On the other hand, if the comet, arriving from the same region of the heavens, so approached as to fall upon the sun in November or December, we should see it for several weeks. For it would then approach from the part of the heavens high above the southern horizon at midnight. Astronomers would be able in a few days after it was discovered to determine its path and predict its downfall upon the sun, precisely as Newton calculated the path of his comet and predicted its near ap-

proach to the sun. It would be known for weeks then that the event which Newton contemplated as likely to cause a tremendous outburst of solar heat, competent to destroy all life upon the surface of our earth, was about to take place; and, doubtless, the minds of many students of science would be exercised during that interval in determining whether Newton was right or wrong. For my own part, I have very little doubt that, though the change in the sun's condition in consequence of the direct downfall upon his surface of a very large comet would be but temporary, and in that sense slight-for what are a few weeks in the history of an orb which has already existed during thousands of millions of years?—yet the effect upon the inhabitants of the earth would be by no means slight. I do not think, however, that any students of science would remain, after the catastrophe, to estimate or to record its effects.

Fortunately, all that we have learned hitherto from the stars favors the belief that, while a catastrophe of this sort may be possible, it is exceedingly unlikely. We may estimate the probabilities precisely in the same way that an insurance company estimates the chance of a railway accident. Such a company considers the number of accidents which occur among a given number of railway journeys, and from the smallness of the number of accidents compared with the largeness of the number of journeys estimates the safety of railway travelling. Our sun is one among many millions of suns, any one of which (though all but a few thousands are actually invisible) would become visible to the naked eye, if exposed to the same conditions as have affected the suns in flames described in the preceding pages. Seeing, then, that during the last two thousand years or thereabouts, only a few instances of the kind, certainly not so many as twenty, have been recorded, while there is reason to believe that some of these relate to the same star which has blazed out more than once, we may fairly consider the chance exceedingly small that during the next two thousand, or even the next twenty thousand years, our sun will be exposed to a catastrophe of the kind.

We might arrive at this conclusion independently of any considerations tending to show that our sun belongs to a safe class of system-rulers, and that all or nearly all the great solar catastrophes have occurred among suns of a particular class. There are, however, several considerations of the kind, which are worth noting.

In the first place, we may dismiss as altogether unlikely the visit of a comet from the star-depths to our sun, on a course carrying the comet directly upon the sun's surface. But if, among the comets travelling in regular attendance upon the sun, there be one whose orbit intersects the sun's globe, then that comet must several times ere this have struck the sun, raising him temporarily to a destructive degree of heat. Now, such a comet must have a period of enormous length, for the races of animals now existing upon the earth must all have been formed since that comet's last visit—on the assumption, be it remembered, that the fall of a large comet upon the sun, or rather the direct passage of the sun through the meteoric nucleus of a large comet, would excite the sun to destructive heat. If all living creatures on the earth are to be destroyed when some comet belonging to the solar system makes its next return to the sun, that same comet at its last visit must have raised the sun to an equal, or even greater, intensity of heat, so that either no such races as at present exist had then come into being, or, if any such existed, they must at that time have been utterly destroyed. We may fairly believe that all comets of the destructive sort have been eliminated. Judging from the evidence we have on the subject, the process of the formation of the solar system was one which involved the utilisation of cometic and meteoric matter; and it fortunately so chanced that the comets likely otherwise to have been most mischievous-those, namely, which crossed the track of planets, and still more those whose paths intersected the globe of the sun-were precisely those which would be earliest and most thoroughly used up in this way.

Secondly, it is noteworthy that all the stars which have blazed out suddenly, except one, have appeared in a particular region of the heavens-the zone of the Milky Way (all, too, on one half of that zone). The single exception is the star in the Northern Crown, and that star appeared in a region which I have found to be connected with the Milky Way by a well-marked stream of stars, not a stream of a few stars scattered here and there, but a stream where thousands of stars are closely aggregated together, though not quite so closely as to form a visible extension of the Milky Way. In my map of 324,000 stars this stream can be quite clearly recognised; but, indeed, the brighter stars scattered along it form a stream recognisable with the naked eye, and have long since been recorded by astronomers as such, forming the stars of the Serpent and the Crown, or a serpentine streak followed by a loop of stars shaped like a coronet. Now the Milky Way, and the outlying streams of stars connected with it, seem to form a region of the stellar universe where fashioning processes are still at work. As Sir W. Herschel long since pointed out, we can recognise in various parts of the heavens various stages of development, and chief among the regions where as yet Nature's work seems incomplete, is the Galactic zone-especially that half of it where the Milky Way consists of irregular streams and clouds of stellar light. As there is no reason for believing that our sun belongs to this part of the galaxy, but on the contrary good ground for considering that he belongs to the class of insulated stars, few of which have shown signs of irregular variation, while none have ever blazed suddenly out with many hundred times their former lustre, we may fairly infer a very high degree of probability in favor of the belief that, for many ages still to come, the sun will continue steadily to discharge his duties as fire, light, and life of the solar system.—Belgravia Maga-

THE SINGER'S PRIZE.

The tall house lowers grimly,
Deformed by smoke and rain;
And the bleared sunshine dimly
Blinks on the window-pane.

Though sore and numb her fingers,
And slowly fades the light,
The girl nor rests nor lingers,
But sews from morn till night.

Her bright young face is sunken,
And fails her gentle breath;
Her fair young form is shrunken,
To fit the robes of death.

And I think of the woodland shadows
That she has never seen;
Of the wonder of song in the meadows,
When all the world is green.

But now the close lips quiver,
The nimble hands are slow,—
The voice she dreams of ever
Rings in the room below.

The mad young poet is singing,
With only a crust to eat;
But a fountain of light is springing
Up from the narrow street.

And whether he sings in sorrow,
Or whether he sings in glee,
He hopes that the world to-morrow
Will list to his melody.

And I think though his heart were burning
With words no man e'er said,
The world would be turning and turning
If to-morrow he were dead.

Only, both late and early,
The girl, as maidens will,
Dreams when the voice comes clearly
Up to her window-sill.

A brave face has she found him,
A manner frank and gay,
And long ago has crowned him
With myrtle wreath or bay.

A good sword clanging loudly,
A plume on waving hair,
A cloak that drapes him proudly,
Such as the players wear.

So whether in glee or sadness He sings, he has won the prize, When he brings the light of gladness To a dying maiden's eyes.

Blackwood's Magazine.

ON THE INFLUENCE OF AUTHORITY IN MATTERS OF OPINION.*

BY THE RIGHT HON. W. E. GLADSTONE, M.P.

it has become almost a common-place ence to ornament, his rigidly conscienof our time to set up, in matters of opin- tious handling, made it difficult for him ion, an opposition between authority and to please the palate of the public, which truth, and to treat them as excluding even then required, as it now greatly one another. It would be about as reasonable to set up an opposition between Still, this unpretending book, it seems, butcher's meat and food. places of this character are no better than probably make the work known to a new expressions of a sentiment, which the understanding, betraying its trust, allows to pass unexamined because it flatters erally act upon the minds of others, it the prevailing fashion. For the fashion is to call in question, and to reject as needlessly irksome, all such rules of mental discipline as, within the sphere of opinion, require from us a circumspect consideration, according to the subjectmatter, of the several kinds as well as degrees of evidence. These rules are troublesome rules; they sadly detract from the ease and slacken the rapidity of the journey towards our conclusions, and thus postpone the enjoyment of mental rest.

Sir Gilbert Lewis has done good service, which I hope rather than expect will be appreciated, in republishing the valuable work by his elder brother, Sir George, On the Influence of Authority in Matters of Opinion. It is perhaps the best monument of that learned, modest, most dispassionate, and most able man. The volume had become extremely rare, and could only be obtained at a high price. Yet though the admirers were in earnest, the circle of them was very narrow. Only a few, a very few, hundred copies ever passed into the hands of the public. It appeared in 1849, at a time when comparative calm prevailed in the world of philosophy and speculation. The remarkable sobriety of the author,

Many are the tricks of speech; and his abhorrence of paradox, his indiffermore requires, highly seasoned food. Common- could not die. Its republication may set of readers; and, as the students of such a book are ordinarily men who sevmay, and I hope will, attain to an influence relatively wide. It must be owned that the volume contains a considerable amount of matter which would be more appropriately placed in a treatise on the Science of Politics. But the main argument is so important, that I am desirous to present a summary which may convey a fair conception of its contents, and invite to a direct examination. Nor will this be done in the spirit of a partisan; for I shall try to extend the conclusion of this weighty writer on a point of the utmost weight, affecting not the frame of his argument, but its application.

> It is with authority for belief or opinion alone, not distinguishing the two, that the work before us deals. It leaves aside authority applicable to action, whether freely or otherwise, as that of the law, of the parent, of the military officer, physician, clergyman, or other professional or specially instructed person. I shall presently take a portion of these topics into view.

> Now, it would sound strangely in our ears were any one of the most distinguished dealers in commonplace, instead of proclaiming, 'not authority, but truth,' to take for his text, 'not examination, not inquiry, but truth.' We should at once reply that examination or inquiry was no more in conflict with truth than our road to London is in conflict with London. The cases are parallel. In-

^{*} An Essay on the Influence of Authority in Matters of Opinion. By George Cornewall London, 1849; 2nd edit. 1875. Lewis, Esq.

quiry is a road to truth, and authority is a road to truth. Identical in aim, diverse in means and in effect, but both resting on the same basis. Inquiry is the more normal, the more excellent way; but penury of time and faculty absolutely precludes the human being from obtaining, by this truly royal road, a sufficient stock of knowledge for the necessary action of life; and authority is the humble but useful substitute. Nor is the distinction between them in any sense one of antagonism; on the contrary, there is, besides the oneness of their ultimate sanction, this notable affinity betwixt them: the knowledge, referable to action, which we obtain by inquiry, is altogether or commonly probable knowledge; and authority is probable knowledge too. Of course both the authority and the inquiry must be regulated by the laws that belong to their re-The rule for us, in spective kinds. whatever case, is one: to make the best practicable use of the best available means for thinking truly and acting rightly, using inquiry where we can, accepting authority where we cannot effectually use inquiry.

Having taken this general view of the region before us, I will now follow the guidance of Sir George Lewis, premising that he seems to aim at working definitions rather than such as are strictly scientific.

His inquiry has no reference to matters of fact; and these he defines as 'anything of which we obtain a conviction from our internal consciousness, or any individual event or phenomenon which is the object of sensation.'

Disputed questions of fact pass into the region of matters of opinion. And, more largely, matters of opinion are 'general propositions or theorems relating to laws of nature or mind, principles and rules of human conduct, future probabiltites, deductions from hypotheses, and the like, about which a doubt may reasonably exist.'

Opinions may be entertained from compulsion, or from inducement of interest. These, I should say, may conveniently be called authority improper; but they rest upon authority proper, when embraced without reasoning because others, believed or assumed to be competent, entertain them.

'A large proportion of the general opinions of mankind are derived merely from authority.' And the advice of competent judges has great influence in questions of practice. When truths have been discovered by original inquirers, and received by competent judges, it is principally by authority that they are accredited and diffused. Such adoption cannot lead to an improvement of knowledge, or to discovery of new truths: 'the utmost he can hope is to adopt the belief of those who, at the time, are least likely to be in error.' We are, of course, to assume this proposition to apply to the cases where it is necessary or harmless to have some belief, and where there are not such patent grounds for doubt or question as to recommend that valuable though sometimes despised expedient, suspense of judgment.

In his second chapter, Sir George Lewis shows the great extent of the opinions founded upon authority. These are such as we derive from instruction in childhood, or from seniors, or from fashion. He shows the extremely limited power of inquiry by the working class; and how even the well-informed rely chiefly on compendia and secondary authorities. He shows how, in strict truth, when we act upon conclusions of our own, for which the original reasons are no longer present to our minds, we become authorities to ourselves; and the direct action of reason is as much ousted, as if we were acting on some authority extrinsic to us. Then there is the deference shown in the region of practice to professional or specially instructed persons; or to friends having experience, which enables a man to discern grounds of belief invisible to the unpractised eye. In these matters we take into view the amount of attention given, the ability of the person, his responsibility, and his impartiality. In his third chapter, our author delivers, as he passes on, a remarkable dictum:

'That high degree of intellectual power which we call genius, and which the ancients attributed to the inspiration of the gods, is in itself inexplicable, and can only be judged by its effects. But some ray of that light is requisite in order to enable a person to be classed among the original teachers and guides of mankind.'

Nor can I refuse the satisfaction of

making another citation:

'The moral sentiments may be so ill directed as to deprave the judgment, even when the understanding is remarkably strong. Men of this sort may be great, but cannot be wise; for by wisdom we mean the power of judging, when the intellectual and moral faculties are both in a sound state. Napoleon affords a striking instance of the corruption of the judgment in consequence of the misdirection of the moral sentiments.'

The authority of the old philosophers as to ethical science was much weakened by their dissensions; while 'astronomy furnishes an example of a science as to which there has been a general agreement of its professors for more than a century.' Mesmerism, homeopathy, and phrenology are rather contemptuously dismissed as 'mock sciences.' But the general description of pretenders is ad-

mirable:

'Nothing is more characteristic of the pretender to philosophy than his readiness to explain, without examination or reflection, all phenomena which may be presented to him. Doubt, hesitation, suspense of the judgment, inquiry before decision, balancing of apparently opposite facts, followed, perhaps, by a qualified and provisional opinion—all these are processes utterly foreign to his mind, and indicative, in his view, of nothing but weakness and ignorance.'

Medicine has always been the favorite field of pretenders; and medical science (for he does not withhold the name) forms an important exception to the rule that 'the physical are better ascertained than

the moral sciences.'

Lewis also inquires what countries, as well as what persons or classes, are to be allowed to weigh in the matter of authority; and finds, that we may justly confine the field of discussion to 'the civilised nations of Europe,' with the Greeks at their head, and the Romans as their pupils following them:

'They made the first great step from barbarism to scientific knowledge; which, perhaps, is more difficult, and more important, than any further advance which they left to be made by their suc-

cessors.'

He excludes not only barbarians, but Chinese, Hindoos, Persians, and Turks,

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on the ground of their want of progress 'in political institutions and scientific knowledge,' from the suffrage, so to speak, or the title to count in that consent which makes up authority.

In the light of these remarks, we may approach his general statement:

In general, it may be said that the authority of the professors of any science is trustworthy in proportion as the points of agreement among them are numerous and important, and the points of difference few and unimportant.

'The opposition which is sometimes made between authority and reason rests

on a confusion of thought.'

And this confusion is favored partly by the fact that the mind, after the choice of its guide, becomes passive, partly by the use of the word authority, in certain cases, for coercive power.

But-

The choice of a guide is as much a matter of free determination as the adoption of an opinion on argumentative grounds.' He illustrates the position by reference to the case of a Roman Catho-The illustration becomes most forcible when, among Roman Catholics of various colors, we choose the school which has now gained, whether finally or provisionally, the upper hand in the Latin Church. The determination to accept as the final rule of belief all declarations by the Pope, which the Pope himself may define to be ex cathedra, is as much an act of 'private individual judgment' as if the determination were to follow Luther, or Wesley, or Swedenborg. I venture upon adding that, if this decision be taken lightly and without observance of the general rules which reasonably guide mankind in the search for truth, it may even be an use of private judgment in the highest degree licentious. The servant in the parable who wrapped his talent in a napkin, and thus (as it were) gave it away from his own use, exercised his private judgment just as much as the fellow-servant who employed it constantly and steadily, and obtained large increase from it. used his private judgment as much; only he used it in a wrong directionjust as if a free citizen of this country were to repair to a country where slavery prevails, and there to sell himself into bondage.

The fourth chapter treats of 'The Applicability of the Principle of Authority to Questions of Religion.' And it begins with a brief description, which seems to belong to the general subject, and therefore to all of the earlier chapters. In it he shows how the authority of which he treats is not that of individuals only. Traditive systems grow up in a course of generations, and by collection, purgation, adjustment, and enlargement or advance, acquire those kinds and degrees of adhesion according to which 'a trustworthy authority may at length be formed, to which a person uninformed on the subject may reasonably defer.' He proceeds:

'This description, however, is not applicable to religion, or at least is only applicable to it within certain limits.'

Now, thus far I have sat at the feet of Gamaliel: I must, however, canvass the limits within which the principle of authority is legitimately applicable to the choice of a religion.

The 'at least' of the sentence I have quoted spans a gulf of a breadth im-measurable. The assertion without 'at least' is that the doctrine of authority has no application to religion. But, with the pacifying intervention of this useful mediator, the proposition only asserts that the application of it is limited and To this assertion there conditional. may be objectors; but surely no other than such as embrace, in all its extravagance, as a rule of belief and action for the human being, the rule that he is to be prout cadaver, vel baculus in manu ambulantis. Short of this, there would not be on the believing or affirmative side of the gulf a single opponent. Vaticanism, for example, might point out that there are many Papal utterances beyond the line of the obligatory definition, many pious opinions broadly distinguished from articles of faith, many propositions belonging to the subject-matter of religion which may be freely affirmed or denied without peril. Such would be its theory; and even in its practice it does not and cannot wholly shut out the immediate action of the mind on the object, or the impressions or conclusions

which may follow from the theory, and which are things distinct from it.

It is, however, clear upon the whole, that the 'at least' in the foregoing prop-

osition really sets aside the unqualified form which immediately precedes it, and that the candor of the author's mind led him to conclude that the principle of authority was truly applicable to the subject of religion, 'within certain limits.'

What those limits are, he presently proceeds to explain.

He conceives, in the first place, that 'all nations have agreed in the substantial recognition of a divine power, superhuman and imperceptible by our senses.' Nearly all human opinion, and all the human opinion entitled to weight, has concurred in this affirmation.

Secondly, he conceives that the whole civilised or authoritative world has also agreed in the acceptance of Christianity.

'Christendom includes the entire civilised world; that is to say all nations whose agreement on a matter of opinion has any real weight or authority.'

This, however, he limits to the acceptance of 'some form of the Christian religion.' He proceeds to show that the nations are not agreed in the acceptance of a particular Church; that the rule of Vincentius, quod semper, quod ubique, quod ab omnibus, is incapable of a strictly literal application; and generally 'there is no consent of competent judges over the civilised world. Inconsistent and opposite forms of Christianity continue to exist side by side.'

He has still, however, another very important concession to make to particular Churches. The authority of the Church of England (and, if we understand him right, of every Church) is limited to its own members. So limited, he thinks Hooker is right in considering it to be 'more competent, in a corporate capacity, to decide doubtful questions than any of its individual members.'

The candor, acumen, breadth, and attainments of Lewis give a great weight to the convictions he has thus expressed. They may be summed up in a few words as follows:

 The consent of mankind binds us in reason to acknowledge the being of God.

2. The consent of civilised mankind similarly binds us to the acceptance of Christianity.

3. The details of Christianity are contested; but in doubtful questions the Church, and, e.g., the Church of Eng-

land at large, with respect to its own members, is more competent than they are individually; and the business and duty of a reasonable man, so far as in these matters he is bound to have an opinion, is to follow the best opinion.

At the same time I do not suppose that our author would have placed the obligation implied by the third proposition on a level, in point of stringency, with that of the two former. He would, I presume, have said (in technical language), a readiness of the individual to submit himself was in this case of imperfect, but in those of perfect obligation.

fect, but in those of perfect obligation.

Nor, we are safe in supposing, would he have held it a duty to know all that had been considered and determined by a Church, or to refrain from any testing inquiries, but only to have practical dealings with what offered itself to the mind, in the course of Providence and of duty and to conduct inquiry according to the true laws of reason.

I am inclined to think that Hooker has placed the doctrine of submission in matter of opinion to a local or special Church higher than, if he had had the experience of the last three centuries to assist him, he would have thought safe; and that Lewis, who had not a particle of egoism or self-assertion to sharpen unduly his critical faculty, may in this remarkable instance have been to a limited extent amiably misled by deference to a great writer. On the other hand, I shall endeavor to show ground for supposing that, on the premisses which sustain the first two propositions, we ought to widen the conclusions at which Lewis has arrived; and this not so much upon ecclesiastical principles, in obedience to the authority of a particular Church, or of the Church at large, quâ Church, as upon philosophical principles, in deference to that general sense of mankind, which in such matters is entitled to claim authority. I take my departure, however, from the standingground of the two propositions, and do not go behind them, or argue with such as contend, in opposition to Lewis, that there is no just authority of consent in existence with respect either to the existence of God, or the acceptance of the Christian religion.

In the first place, belief in God surely implies much more than that He is su-

perhuman and imperceptible. It seems to involve, as a general rule, the following particulars, which Lewis has not specified, but may by no means have intended to exclude.

1. That He is conceived of as possessing in Himself all attributes whatsoever which conduce to excellence, and these in a degree indefinitely beyond the power of the human mind to measure.

2. Over and above what He is in Himself, He is conceived of as standing in certain relations to us; as carrying on a moral government of the world. He is held to prescribe and favor what is right; to forbid and regard with displeasure what is wrong; and to dispose the courses of events in such a way that, in general and upon the whole, there is a tendency of virtue to bring satisfaction and happiness, and of vice to entail the reverse of these, even when appearances, and external advantages, might not convey such an indication.

3. The same wide consent of mankind, which sustains belief in a God, and invests Him with a certain character, has everywhere perceptibly, though variably and sometimes with a great vagueness of outline, carried the sphere of the moral government which it assigns to Him beyond the limits of the visible world. In that larger region, though it lie beyond the scope of our present narrow view, the belief of theistical mankind has been, that the laws of this moral government would be more clearly developed, and the normal relation between good and evil, and between their respective consequences, fully established.

4. Along, therefore, with belief in a God we have to register the acknowledgment of another truth, the doctrine of a future state of man, which has had a not less ample acceptance in all the quarters from whence the elements of authority can be drawn; and has, indeed, in the darkest periods and places of religion, been found difficult to eradicate, even when the Divine Idea had been so broken up and degraded, as to seem divested of all its most splendid attributes.

In the second place, I come to the proposition of Sir George Lewis, that the acceptance of Christianity is required of us by a scientific application of the principle of authority, but without any refer-

ence to this or that particular form, or

tenet, of the religion. But as we found, in the prior instance of simple theism, that the authority of consent would carry us much beyond the acknowledgment of a disembodied abstraction, so, upon examining the case of Christianity, we shall find that what has been handed down to us under that name as part of the common knowledge and common patrimony of men is not a bare skeleton, but is instinct with vital warmth from a centre, and has the character, notwithstanding all the dissensions that prevail, of a living and working system not without the most essential features of an unity.

This I shall endeavor to show as to the following points:

- 1. The doctrine of Revelation.
- 2. The use of Sacraments.
- 3. The Christian Ethics. 4. The Creed.
- 4. The Creed.
 5. The doctrines of the Trinity and the Incarnation.
- 1. Regarded historically, believers in Christ, casting anchor, so to speak, in an older dispensation, have uniformly acknowledged that God had 'at sundry times and in divers manners' made Himself known to the rational mind of man by a special communication or inspiration, over and above that knowledge of Himself which He had imparted by the books of nature and of life or experience. And this finally in the Gospel. They therefore have held themselves to be in possession of a special treasure of divine knowledge, communicated in a manner which carried with it a peculiar certainty; and such a belief, called the belief in inspiration, and pervading the whole of Christendom from the very first, is of itself a material amplification of the idea conveyed by the mere name of Christianity.
- 2. Next, there is a similar universality of Christian testimony in favor of the use of certain rites called Sacraments, as essentially belonging to, and marking out to view, the Christian scheme. I have nothing here to do with the question whether the Christian Sacraments are two or seven, or any other number in particular, or whether, as was suggested by Bishop Pecock in conformity with St.

Augustine and others, the word be in itself susceptible of even a wider application. Nor again with the various bodies of separatists who at different times have rejected infant baptism. The fact that, rejecting the catholic and immemorial practice of baptism in infancy, they should still have retained the rite, renders them even stronger witnesses in its favor than they would have been if they had agreed as to the proper season of administration. Again, it is to be observed that the sacraments have not been held as bare signs. Even the Scotch early Reformers, who may be said to represent a kind of ultima Thule in the opinions of the day, did 'utterly damn' those who thus held. They have been deemed, according to the Anglican definition, to be 'outward and visible signs of an inward and spiritual grace.' When the exact relation of the sign to the thing signified comes to be considered, then indeed no inconsiderable body of differences comes into view, and the argument of consent can hardly be pressed within the definitions of our author. But up to that point it is strictly applicable. The very limited exception of a society founded among the English more than sixteen hundred years after Christ, scarcely embracing a thousandth part even of that race, and unable to quote by way of precedent * more than a handful of dubious individual cases in all history, cannot, however respectable on social grounds, constitute an appreciable deduction from the weight of the Christian testimony. It could hardly be taken into account if it had, which it has not, at any time developed into a theology that basis of sentiment on which it mainly

3. Thirdly, the entire breadth of the Christian consent sustains a system of morality which is no less distinctive of the Gospel than is its doctrine.

Lewis has nowhere applied to morality the limitations to which he considered that religion must submit before it could take the benefit of the scientific principle of authority. He appears to hold that morality enjoys authority in a manner substantially the same as other established knowledge. It is plain that the authority of consent tells in its behalf

^{*} Heb. i. I.

^{*} Barclay's Apology, Prop. xii. Objection 6,

more widely than in behalf of Christiancode, for here too we have to contend with something of the same difficulty, arising from diversity about particulars, as in the case of Christian doctrine; but as to this great and broad proposition, that there exists a law of duty, what Sophocles called a ἀψίπους νόμος, binding man and man. We find abundant evidence of this in a multitude of quarters beyond the precinct of Divine Revelation: in the various systems of religion, especially as they were projected by their founders, for example in that of Mahomet; in the provisions of public law, in the works of many philosophers, in primitive manners as they are developed by the monuments of Egypt, or, much more fully and less conventionally, by the poems of Homer. All these were with great variation, both as to the behavior enjoined, and as to the persons towards whom such behavior was binding. But the Christian morality, gathering together the scattered fragments, and building them into a great temple of Duty, was a new thing as a whole, though in respect to its basis, and to the acknowledgment and even the practice of its parts disjointedly, it was able to call in the aid of non-Christian and pre-Christian testimony. The culmination and perfection of the Christian morality was found in that high and severe doctrine of marriage, against which, we may confidently anticipate, and almost venture to predict, that the anti-Christian spirit will direct its first great attack, encouraged by those preliminary operations in the legislative recognition of divorce which have already, from a variety of ill-omened causes, found a place upon our own, as well as upon other statute-books.

Some have been bold enough to say that the wide recognition, at the present day, of ethical doctrines in practical forms is due not to Christianity, but to the progress of civilisation. In answer to them, I will only halt for a moment, to ask the question how it came that the Greek and, in its turn, the Roman civilisation, each advancing to so great a height, did not similarly elevate the moral standards. And I shall by anticipation put in a eaveat against any attempt to reply merely by exhibiting here and there an unit picked out of the philosophic

schools, or the ideal pictures which ity. Not, however, as to any complete may be found in the writings of a tragedian; pictures which have no more to do with the practical life of contemporary Greece, than have the representations of the Virgin and the Child, so much admired in our galleries, with the lives and characters of those who look on them, or in most instances of those who have painted them. A comparison between Epictetus and Paley, or between Aristotle and Escobar, would be curious, but would not touch the point. I do not inquire how low some Christian may have descended, or how high some heathen may have risen, in theory, any more than in practice. When I speak of the morality of a religion, I mean the principles and practices for which it has obtained the assent of the mind and heart of man; which it has incorporated into the acknowledged and standing code of its professors; which it has exhibited in the traditional practices, sometimes of the generality, sometimes only of the best. But this is a large subject, and lies apart. My present argument is only with those who, like Sir George Lewis, hold that Christianity lies within the true scope of the principle of authority, but do not develope the phrase Christianity into its specific meanings.

To such it may be fairly put that under this name of Christianity we are to understand something that has some sort of claims and sanctions peculiarly its own; for it is not religion only, but Christian religion, which comes to us accredited by legitimate authority. Now I hope to obtain a general assent when I contend that Christianity can have no exclusive or preferential claim upon us, unless that, which distinguishes it as a religion, has some proportionate representation in the sphere of morality. In its ultimate, general, and permanent effects upon morality, largely understood, the test of the value of a religion is to be found; and if mankind, in its most enlightened portions, has lent the weight of its authority to Christianity, we must needs understand the word to carry and include some moral elements due and peculiar to the religious system.

And it is not difficult to sketch in outline some at least of the features which give speciality to Christian morals, without disturbing their relation to the general, and especially the best, non-Christian morality of mankind, First Christian morals exhibit a reproduction and foremost, they are founded on the character and pattern of a Person, even more, if possible, than on his words. In Him they recognise the standard of consummate and divine perfection. Sec-ondly, they draw all forms of duty, to God, to men, and to ourselves, from one and the same source. Thirdly, they are to be practised towards all men alike, independently of station or race, or even life or creed. Fourthly, they are meant and fitted for all men equally to hold: and their most profound vitality, if not their largest and most varied development, is within the reach of the lowly and uninstructed, in whose minds and hearts it has, for the most part, fewer and less formidable barriers to surmount, or strongholds,' in the Apostle's language, to cast down. Fifthly, the Christian law has placed the relation of man and woman, as such, in the great institution of marriage, and the provision for the continuance through the family of the species, upon such a footing as is nowhere else to be found. I do not say that this is not a restitution of a primitive law; but, if so, it was one the strain of which was found too great for those to whom it was given to bear. This law, with all its restraints of kin, of unity, and of perpetuity, is perhaps the subtlest as well as the most powerful of all the social instruments which the Almighty has put into use for the education of the race; and it is one, I am firmly persuaded, which no self-acting force, no considerations of policy, will ever be able to uphold in modern societies, when it shall have been severed from its authoritative

I will not dwell in detail on the mode in which the Gospel treats the law of love, the law of purity, or that which is perhaps most peculiar to it, the law of pain; but will be content with saying, sixthly and lastly, that Christian morals, as a whole—as an entire system covering the whole life, nature, and experience of man-stand broadly distinguished by their rich, complete, and searching character from other forms of moral teaching now extant in the world. The limitation implied in these last words has been introduced simply because it would be inconvenient on this occasion to examine whether, and in what respects, the of a primitive law once in force among the whole or a portion of mankind.

It seems, then, that, if the argument of authority, or consent, be available on behalf of Christianity, we cannot do otherwise than include in the scheme thus recommended a peculiar body of moral teaching, together with the notions of an inspired origin, and of certain outward or sacramental rites, universal, perpetual, and inseparable from the system to which they are attached.

4. I now proceed a step further; and contend that this Christianity must in reason be understood to include a doctrinal, as well as a moral and a symbolical, system. I am not so desirous to fix the exact particulars of that doctrinal system, as to show that, when we speak of Christianity as having received the favorable verdict of the portion of mankind alone or best qualified to judge in such a matter, we do not mean the mere acknowledgment of a name, but we mean, along with other things, the acceptance of a body of truths which have for their centre the person and work of Christ. This body of truths has its foremost expression in the Creed known as that of the Apostles, and in a document of greater precision and development and of equal and more formal authority-the Creed of Constantinople, commonly called the Nicene Creed. If the authority of civilised and intellectual man be available on behalf of something that we agree to call Christianity, my contention is that it is likewise available for these two great historic documents. We cannot reasonably make any sensible deduction from the weight of the propounding authority when, in the formula of consent, for the word Christianity we substitute the Creed of the Apostles, together with the Nicene Creed.

The human mind (I have said) is accustomed to play tricks with itself in every form; and one of the forms, in which it most frequently resorts to this operation, is when it attenuates the labor of thought, and evades the responsibility of definite decision, by the adoption of a general word that we purposely keep undefined to our own consciousness. So men admire the British Constitution without knowing or inquiring what it is,

say or think what it means. In such cases the general word, instead of indicating, like the title of an author's works, a multitude of particulars, becomes a blind, which, on the one hand, excludes knowledge, and, on the other, leaves us imbued with the notion that we possess it.

And my contention is that, whatever be the momentary fashion of the day in which we live, that same tradition and testimony of the ages, which commends Christianity to us, has not been a chimera or a chameleon, but has had from the first, up to a certain point of development, one substantially definite meaning for the word, a meaning of mental as well as moral significance; and has, as a matter of history, expressed this meaning in the Creeds. This Christianity has shed off from it, on this side and on that, after debate and scrutiny, and furthermore after doubt and even sometimes convulsion, all the conceptions irreconcilably hostile to its own essence, by a standing provision as normal as are the reparatory processes of material nature; and has been handed on continuously in uniformity of life, though not, it may be, in uniformity of health. So that reason requires us, when we speak of Christianity, to expound the phrase agreeably to history, if we mean to claim on its behalf the authority of civilised man, since it is to the expounded phrase, and not the bare shell, that that authority attaches. It is in this sense what the visible Church also claims to be, a city set on a hill; not, indeed, a city within walls that can neither grow nor dwindle, but yet a city widely spread, with a fixed heart and centre, if with a fluctuating outline; a mass alike unchangeable, perceptible, and also determinate, not absolutely or mathematically, but in a degree sufficient for its providential purpose in the education of mankind. Of this mass, compounded of tenets, moral laws, and institutions, the core, so far as tenets are concerned. is exhibited in the Creeds.

If I have not named the Athanasian Creed as standing in the same category, it is not because its direct doctrinal statements have received an inferior acceptance from the students of Christian theology, but because it has not been, in at all the same sense, an instrument either

and profess Christianity but decline to instruction. If I do not dwell upon the difference between the East and the West in respect to what is called the Double Procession, it is because both parties are agreed that the variance of form does not oblige us to assert a difference of meaning. If I do not lay stress on those dogmatic distinctions among Christian communities of the East, which cause some of them to be placed in the class of heretical bodies, it is because, so far as I can understand, those differences seem to rest in the region of verbal expression, much more than to take effect in the practical conceptions of religion. If I pass lightly by the fact that large bodies of Protestants do not formally recognise the Creeds as documents, it is because I apprehend their objection not to lie against the contents, but only against the recognition, so that they continue available as witnesses to the substance which the documents enshrine. If I do not attach importance to the want of absolute coherency between the terminology of some of the early Fathers and the final expression of doctrine adopted by the Councils and sealed by the permanent assent of the Catholic Church, it is because I conceive such Fathers to have spoken without scientific precision in matters where human rashness and conceit had not yet created a necessity for scientific discussion and decision, and for the selection, and an authoritative sealing and stamping, of such phrases as seemed, upon the whole, the best and safest to indicate, rather than express, unfathomable verities; on which our hands indeed (so to speak) may lay effectual hold, but which our arms are totally unable to embrace. If I do not expatiate upon the undoubted truth that the recitals of the Creeds themselves are so largely those of fact rather than pure dogma, it is because the circumstance is no more than a normal result of a religious system founded upon a living Person, rather than an abstract conception.

5. It was profoundly observed by Möhler, in his Symbolik, that the controversies of the sixteenth century had been controversies concerning the human, not the divine, side of Christianity. Our forefathers, in the earlier ages of the Church, had fought and won for us the of Christian profession or of Christian battles in which the question lay between safe and unsafe, adequate and inadequate, conceptions of the Divine Object of worship. They sowed, and we reap; they suffered, and we enjoy. But the primitive Creeds, which have now, not less than heretofore, their great office to fulfil, naturally belong to that supreme province, that theology proper, upon which, among the great body of Christians, neither the din of debate, nor the pain of doubt, is now or has for many ages been sensible. New ranges of controversy have been opened, lying in lower though still elevated regions. They have turned on the condition of man apart from the Gospel, the mode of his approach to God, the reflection of his new state in his consciousness, his relation to the Church, his relation to the saints, his existence after death. To the common view, it is rather the points which at any given time are most contested, than those which lie deepest in the system, that are tenaciously held, and, because tenaciously held, are placed in the first rank of dignity. This is a dislocation of the natural order of appreciation, but it is in great part due to the fact that the propositions of the Creeds are taken for granted among us. For the modern mind, we may use a translation of language. We will now say no more of the Creeds; but urge that that authority of general consent, which presses upon us the claims of Christianity, means by the phrase a system founded on the doctrines of the Holy Trinity and the incarnation of our Lord. All notions opposed to those doctrines were, in early times, successively put upon their trial, and decisively, though not always easily, ejected from the great idea of the Christian revelation. Since the time of the two Socini, a different conception of the Deity and of redemption, which has counted among its adherents men remarkable for ability and character, has just been able to maintain a fluctuating and generally rather feeble existence. Its note of dissonance has been so slightly audible in the great and solemn concert of the ancient belief, that, like the deviations of the first four centuries, it can make no appreciable breach in, or deduction from, the authority which vindicates for these great conceptions the central seat in the Christian

Here I break off. Desirous to re-

nounce illusions, and to eschew the indulgence of any private partiality, I should hesitate to ask for the inclusion of any more particular or complete conception of Christianity in that use of the phrase which, according to the reasoning of Lewis, is entitled to the same benefit from the principle of authority, as the established truths of other sciences. I should regret to strain the argument; and am content to say that the Christianity which claims our obedience is a Christianity inspired, sacramental, ethical, embodied in certain great historic documents, involving certain profoundly powerful and operative doctrinal conceptions. A great mass and momentum of authority may be pleaded for much that lies beyond the outline I have drawn. Nearly half the Christian world adopts the entire Roman system. Throwing in the Eastern Churches, nearly three-fourths of it agree in certain usages or tenets, such as the invocation of saints, and some kind, not uniform, of religious devotion towards images. This large proportion is yet further swelled by the accession of the Anglican family of Churches, in regard to the framework of the visible Church or polity of Christians, and to those other points in which they are thought by many to savor more of the unreformed scheme of Christianity than the reformed. But all these are matters on which a large section of the Christian world, amounting to perhaps a sixth of the whole, and composed of the many active bodies of evangelical Protestants, introduce so large an element of dissent, that although authority by no means quits the field, yet it calls in the aid of reasoning to decide the day, inasmuch as nothing short of the general consent approaching to universality, or, as it has been called, to moral unanimity, can dispose of the case without that aid.

The sphere of religion is wide and diversified; and authority, in this region, stands as a hierarchy, constituted in degrees and orders, with many subaltern shades of diversity. But it is broadly distinguished from a stratarchy, from the corps of officers of an army, where an absolute obedience is due from the private soldier, and from every successive grade, to a superior, till the command be reversed from above; and there is not granted to the inferior even that bare

initiative of redress, which is implied in a right of appeal.

The species of authority with which we have been dealing may be called, for convenience, the major authority. Of that minor authority, which may still constitute a great element in rational discussion, and which admits great diversity of degree, we have a good instance in a remarkable passage, which was quoted by Dr. Newman in one of his controversial works on behalf of the English Church,* from Bishop Van Mildert:

If a candid investigation be made of the points generally agreed upon by the Church Universal, it will probably be found that at no period of its history has any fundamental or essential truth of the Gospel been authoritatively disowned. As far as the Church Catholic can be deemed responsible, the substance of sound doctrine still remains undestroyed at least, if not unimpaired. Let us take, for instance, those articles of faith, which have already been shown to be essential to the 'Christian covenant: the doctrines of the Trinity, of our Lord's Divinity and Incarnation, of his Atonement and Intercession, of our Sanctification by the Holy Spirit, of the terms of acceptance, and the Ordinances of the Christian Sacraments and Priesthood. At what period of the Church have these doctrines, or either of them, been by any public act disowned or called in question?

Only the length of the passage checks my adding to my citation.

Although, then, authority loses its commanding position when the great volume of human consent is broken into leaves or sections, we are not to infer that it is reduced to zero. Admitting that, while the Christian world is wonderfully agreed on the central verities of faith, and still more widely on those of morals, its many fractions are severed in relation to matters of grave import, I would still contend that the authority of each of those fractions is not indeed final, but yet real and weighty for those who belong to it, and they ought not to depart, except upon serious and humble examination, as well as clear conviction, from the religion they have been brought up to profess, even though non-Christian; for it is the school of character and belief, in which Providence has placed them. Even though non-Christian; and even while I follow Lewis in urging that the undivided authority of civilised and progressive man demands of us the acceptance of Christianity. For even the acceptance of such authority is a moral act, and cannot be performed without certain operations both of the mind and of the heart. Suppose that as a Hindoo or Mahometan, having studied history, I am moved by the argument of Lewis to embrace Christianity, I must still learn what it is that I accept, and the very assent to such an argument requires time and implies a mental process. Nothing is more rash, I had almost said more shocking, than levity or irreverence in the change of religion; and this levity, rashness, and irreverence may be exhibited even in the act of submission to authority when clothed in its most extravagant and exaggerated form.

Although I am persuaded that the substance of Lewis's work is unassailable, I am not insensible to the defects of its form. I have noticed already that a large portion of it seems to belong to a work on politics. It is oddly annexed to the main argument, for in politics authority is coercive; and nothing, perhaps, has more tended to confuse the public mind as to that authority which is both moral and graduated, than the fact that we are chiefly familiar with an authority which, as towards the individual, is both absolute and compulsory. Next to this authority of the State, we are accustomed to the idea of parental authority. In it the two great elements are mingled; but there is too great a tendency on the part of parents, and that not seldom found in conjunction with strong affection, to give prominence to the coercive aspect. Our author would have done us a further service, had he laid out with clearness, and even sharpness, the several kinds of authority; for the region which he traverses is occupied by a garrison of jealous and self-interested fallacies, always in arms against the intrusion of those sober truths which bring many a catastrophe upon our castles of conceit. I will endeavor in conclusion to present a succinct outline of the case.

Be it observed, then, that authority claims a legitimate place in the province of opinion, not as a bar to truth, but as a guarantee for it; not as an absolute guarantee, but only when it is as the best that may be had; not in preference to

^{*} Lectures on the Prophetical Office of the Church, p. 250, from Bishop Van Mildert's Bampton Lectures, viii.

personal inquiry reaching up to the sources, but as the proper substitute in the multitude of instances where this is impracticable. Authority, rightly understood, has a substantial meaning; in that meaning, it is not at variance or in competition either with truth, or with private inquiry and private judgment. It is a crutch, rather than a leg; but the natural energy of the leg is limited, and, when the leg cannot work, the crutch

Further, the fact to which we ought to be alive, but for the most part are not, is that the whole human family, and the best and highest races of it, and the best and highest minds of those races, are to a great extent upon crutches, the crutches which authority has lent them. Even in the days of Bacon, even in the days of Dante, when knowledge, as the word is commonly understood, was so limited that some elect minds of uncommon capacity and vigor could grasp the whole mass of it, they still depended largely upon authority. For that aggregate of knowledge, which they were able to grasp, was but book-knowledge, and not source-knowledge. It was to a great extent not knowledge of subjects, but of what specially qualified men had said upon subjects. As we now stand, no individual man holds or can hold that relation to universal knowledge, which was held by Dante, or by Bacon, or by Leibnitz. A few subjects, in most cases a very few indeed, are or can be known in themselves by direct and immediate study; a larger number by an immediate knowledge of what writers, or the most accredited writers, have said upon them; the largest number by far only from indirect accounts, or as it were rumors, of the results which writers and students have attained.

Ad nos vix tenuis famæ perlabitur aura.

It seems, however, safe to say that the largest part even of civilised nations, in the greater proportion of the subjects that pass through the mind, or touch the course of common action, have not even this, but have only a vague unverified impression that the multitude, or the best, think so and so, and that they had better act and think accordingly. To some this may be an unwelcome announcement. The fact of their ignor-

ance, and its burden, they have borne in patience; but it is less easy to bear equably the discovery how great that burden is.

Authority, in matters of opinion, divides itself (say) into three principal classes. There is the authority of witnesses. They testify to matters of fact: the judgment upon these is commonly though not always easy; but this testimony is always the substitution of the faculties of others for our own, which, taken largely, constitutes the essence of authority. This is the kind which we justly admit with the smallest jealousy. Yet not always: one man admits, another refuses, the authority of a sea-captain and a sailor or two on the existence of the sea-serpent.

Then there is the authority of judges. To such authority we have constantly to submit. And this too is done for the most part willingly; but unwillingly, when we have been told what we are about. These judges sometimes supply us with opinions upon facts, sometimes with facts themselves. The results, in pure science, are accepted by us as facts; but on the methods by which they are reached, the mass, even of intelligent and cultivated men, are not competently informed. Judgments on difficult questions of finance are made into compulsory laws, in parliaments where only one man in a score, possibly no more than one in a hundred, thoroughly comprehends them. All kinds of professional advice belong to this order in the classification of authorities.

But, thirdly, as Lewis has observed with much acuteness, we are in the constant habit of following yet another kind of authority, the authority of ourselves. In very many cases, where we have reached certain results by our own inquiries, the process and the evidence have been forgotten, and are no longer present to the mind at times when we are called upon to act; they are laid aside as no longer necessary; we are satisfied with the knowledge that we inquired at a former time. We now hold to the conclusion, not remembering accurately its warrant, but remembering only that we once decided that it had a warrant. In its essence, this is acting upon authority. From this sort of action upon authority I believe no man of active life, however tenacious be his

memory, can escape. And no man who is content to act on this kind of authority, is entitled to object in principle to acting on other kinds. That I myself am the authority for myself is only an accident of the case. It would be more, could I lay down the dogma that an inquiry by me is better and more conclusive than an inquiry by others. We are bound to act on the best presumption, whether that presumption happens to rest on something done by others, or on something we have done ourselves.

While the naked exhibition of the amount of guidance found for us by authority is certainly unflattering, it has a moral use in the inculcation of much humility. It also offers to the understanding a subject of profound and wondering contemplation, by revealing to us, in measureless extent, the law of human interdependence, which again should have its moral use in deepening the sense

of the brotherhood of man.

A general revolt, then, against authority, even in matters of opinion, is a childish or anile superstition, not to be excused by the pretext that it is only due to the love of freedom cherished in excess. The love of freedom is an essential principle of healthy human action, but is only one of its essential principles. Such a superstition, due only to excess in the love of freedom, may remind us that we should be burned to cinders were the earth capable of imitating its wayward denizens, and indulging itself only in an excess of the centripetal force. We may indeed allow that when personal inquiry has been thorough, unbiassed, and entire, it seems a violation of natural law to say that the inquirer should put it aside in deference to others, even of presumably superior qualification. Here there enters into the case a kind of sacred right of insurrection, essential as a condition of human progress. But the number of the cases in which a man can be sure that his own inquiry fulfils these conditions is comparatively insig-

the condition of the selection of the se

nificant. Wherever it falls short of fulfilling them, what may be called the subjective speciality of duty disappears; there remains only the paramount law of allegiance to objective truth, and that law, commonly dealing with probable evidence, binds us to take not that evidence with which we ourselves have most to do, but that which, whether our own or not, offers the smallest among the several likelihoods of error. The common cases of opposition lie not between authority and reasonable conviction, but between authority and fancy; authority and lame, or weak, or hasty, or shallow, processes of the mind; authority and sheer self-conceit or headstrong or indolent self-love.

There is something noble in a jealousy of authority, when the intention is to substitute for it a strong persistent course of mental labor. Such labor involves sacrifice, and sacrifice can dignify much error. But unhappily the rejection of authority is too often a cover for indolence as well as wantonness of mind, and the rejection of solid and venerable authority is avenged by lapse into the most ignoble servitudes. Those who think lightly of the testimony of the ages, the tradition of their race, which at all events keeps them in communion with it, are often found the slaves of Mr. A. or Mr. B., of their newspaper or of their club. In a time of much mental movement, men are apt to think it must be right with them, provided only that they move; and they are slow to distinguish between progress and running to and fro. If it be a glory of the age to have discovered the unsuspected width of the sway of law in external nature, let it crown the exploit by cultivating a severer study, than is commonly in use, of the law weighty beyond all others, the law which fixes, so to speak, the equation of the mind of man in the orbit appointed for the consummation of his destiny .- The Nineteenth Century.

YOUNG MUSGRAVE.

BY MRS. OLIPHANT.

CHAPTER VII.

WHAT THE CHILDREN DID AT THE CASTLE.

THE arrival of the children was an era at Penninghame, from which afterwards everything dated; but the immediate result was a very curious and not very comfortable one. As they had been introduced into the house so they lived in it. Mr. Musgrave never mentioned them, never saw them or appeared to see them, ignored their existence, in short, as completely as if his faculties had been deadened in respect to them. His life was in no way changed indeed; the extraordinary revolution which had been made to everyone else in the house by this change showed all the more strongly from the absolute absence of all effect upon him. He read, he wrote, he studied, he took his usual quiet exercise exactly as he did before, and never owned by a word or look that he was conscious of any alteration in the household. For a little while the children were hushed not to make a noise, and huddled away into corners to keep them out of sight and hearing; but that arrangement was too unnatural to continue, and it very soon happened that their presence was forced upon him by unmistakable signs, by both sight and hearing. But the Squire took not the slightest notice. He looked over their heads and never saw them. His ear was engaged with other sounds, and he did not hear them. By this system of unconsciousness he 'deprived himself indeed of some evident advantages; for how can you interfere with the proceedings of those whose very existence you ignore? He could not give orders that the children should make less noise, because he professed not to be aware of their presence; nor send them out of his sight, when he was supposed not to see them; and in consequence this blindness and deafness on his part was perhaps a greater gain to them than to himself. The mental commotion into which he had been thrown by their arrival had never been known he woke in the morning his first thought

to any one but himself. He had a slight illness a few days after-his liver out of order, the doctor said; and so worked off his excitement without disclosing it to any one. After this he resumed his serenity, and completed his heraldic study. The history of the augmentation granted to the Musgraves in the year 1393 in remembrance of the valor of Sir Egidio or Giles Musgrave in the Holy Land made rather a sensation among kindred students. It was a very interesting monograph. Besides being a singularly striking chapter of family history, it was, everybody said, a most interesting contribution to the study of heraldic honors-how and why they were bestowed: especially as concerning augmentations bestowed on the field for acts of valor-a rare and exceptional distinction. The Squire made a little collection of the notices that appeared in the newspapers of his "Monograph," pasting them into a pretty little book, as is not unusual to amateur authors. He enjoyed them a great deal more than if he had been the author of a great history, and resented criticism with corresponding bitterness. He was very proud of Egidio, or Giles, who died in the fifteenth century; and it did not occur to him that there was any incongruity in feeling this, yet ignoring the little boy up stairs.

And yet day by day it grew more hard to ignore him. Mr. Musgrave in his study, after the enthusiasm of his monograph was over, could not help hearing voices which it was difficult not to remark, The enthusiasm of composition did a great deal for him, it carried him out of the present. It filled him with a delightful fervor and thrill of intellectual excitement. People who are always writing get used to it, and lose this sense of something fine and great which is the inheritance of the amateur. Even after the shock of that renewed intercourse with the son whom he had cast off, Mr. Musgrave, so long as his work lasted, found himself able to forget everything in the happiness it gave. When

he went to bed with the fumes of his own paragraphs in his head. He was carried away by it. But when all this intellectual commotion was over, and when the ennui of having nothing further to do had swallowed up the satisfaction of having finished, as it so soon does, then there came a very difficult interval for the Squire. He had no longer anything to absorb him and keep him comfortably above the circumstances of ordinary life, and as he sat in his library, only reading, only writing a letter, no longer absorbed by any special study, or by the pride and delight of recording in fine language the results of that study, ordinary life stole back, as it has a way of doing. He be-gan to hear the knocks at the door, the ringing of bells, and to wonder who it was; to hear steps going up and down the stairs, to be aware of Eastwood going to and from the dining-room, and the rustle of Mary's dress as she went about the house in the morning, and in the afternoon passed with a soft boom of the swinging door into her favorite hall. The routine of the house came back to the old man. He heard the servants in the kitchen, the ticking of that measured, leisurely old clock in the hall which took about five minutes to spell out the hour. He was not consciously paying any attention to these things. On the contrary, he was secluded from them, wrapt in his books, knowing nothing of what was going on; yet he heard them all; and as he sat there through the long winter days and the still longer winter evenings, when there was rain or storm out of doors, and nothing to break the long, still blank of hours within, a sound would come to him now and then, even before the care of the household relaxed—the cry of a little voice, a running and pattering of small feet, sometimes an outburst of laughter, a small voice of weeping, which stirred strangely in the air about him and vaguely called forth old half-extinct sensations, as one might run over the jarred and half-silent keys of an old piano in the dark. This surprised him at first in his loneliness-then, when he had realised what it was, hurt him a little, rousing old wrath and bitterness, so that he would sometimes lay down his pen or close his book and all the past would come before him-the past in

was of this work which he had to do, and which John his son had disappointed. mocked, insulted, and baffled his father. He would not allow himself to realise the presence of these children in the house, but he could not avoid thinking of the individual who stood between him and them, who was so real while they were so visionary. Always John! He had tried to live for years without thought of him and had been tranquil; it was grievous to be compelled thus to think of him again. This all happened, however, in the seclusion of his own mind, in the quiet of his library, and no one knew anything of it; not his daughter, who thought she knew his looks by heart, nor his servant, who had spelled him out by many guesses in the dark-as servants generally do-and imagined that he had his master at his fingers' ends. But during all this time while these touches were playing upon him, bringing out ghosts of old sensations, muffled sounds and tones forgotten, Mr. Musgrave publicly ignored the fact that there were any children in the house, and contrived not to see them, nor to hear them, with a force of selfgovernment and resolution which, in a nobler cause, would have been beyond all praise.

> The effect of the change upon Miss Musgrave was scarcely less remarkable, though very different. Her mental and moral education had been of a very peculiar kind. The tragedy which swallowed up her brother had interrupted the soft flowing current of her young life. All had gone smoothly before in the natural brightness of the beginning. And Mary, who had little passion in her temperament, who was more thoughtful than intense, and whose heart had never been awakened by any strong attachment beyond the ties of nature, had borne the interruption better than most people would have borne it, and had done her duty between her offending brother and her enraged father with less strain and violence of suffering than might have been involved. And she had got through the more quiet years since without bitterness, with a self-adaptation to the primitive monotony of existence which was much helped, as most such virtues are, by temperament. She had formed her own theory of life as most people do by the time they reach even the earliest stages of middle age; and this theory

was the philosophical one that happiness, or the calm which does duty for happiness in most mature lives, was in reality very independent of events; that it came from within, not from without; and that life was wonderfully equal, neither bringing so much good, nor so much evil, as people of lively imaginations gave it credit for doing. Thus she had herself lived, not unhappy, except at the very crisis of the family life. She had suf-fered then. Who could hope (she said to herself) to do other than suffer one time or another in their life? But since then the calm and regularity of existence had come back, the routine which charms time away and brings content. There had been no doubt expectations in her mind which had come to nothing-expectations of more active joy, more actual well-being than had ever fallen to her lot; but these expectations had gradually glided away, and no harm had been done. If she had no intensity of enjoyment, neither had she any wretchedness. She had enough to do; her life was full, and she was fairly happy. So she said to herself; so she had said many a day to Mr. Pen, who shook his mildly melancholy head and dissented—as far as he ever dissented from anything said by Miss Mary. Her brother was lost—away -wandering in the darkness of the great world, as in a desert. But if he had been near at hand, absorbed in his mar-. ried life, his wife, who was not of her species, and his unknown children, would not he have been just as much lost to Mary? So she persuaded herself at least; and so lived tranquilly, happy enough-certainly not unhappy; -and why should an ordinary mortal, youth being over, wish for more?

Now all at once so great a change had happened to her, that Mary could no longer understand, or even believe in, this state of mind which had been hers for so many years. Perfectly still, tranquil, fearing nothing—when her own flesh and blood were in such warfare in the world! How was it possible? Wondering pangs of self-reproach seized her; mysteries of death and of birth, such as had never touched her maidenly quiet, seemed to surround her, and mock at her former ease. All this time the gates of heaven had been opening and shutting to John. Hope sometimes,

sometimes despair, love, anguish, want, pain, had struggled for him, while she had sat and looked on so calmly, and reasoned so placidly about the general equality of life. How could she have done it? The revelation was as painful as it was overwhelming. Nature seized upon her with a grip of iron, and avenged upon her in a moment all the indifferences of her previous life. The appeal of these frightened children, the solemn charge laid upon her by her brother awoke her, with a start and shiver. How had she dared to sit and look through calm windows, or on the threshold by her tranquil door, upon the struggles, pangs and labors of the other human creatures about her? Was it excuse enough that she was neither wife nor mother? had she therefore nothing to do in guarding, and continuing, and handing down the nobler successions of life? Mary was startled altogether out of the state of mind habitual to her. Instead of the calm lady of the manor, the female squire, the lawgiver of the village which she had hitherto been, a little above the problems that were brought to her, a little wanting in consideration of motives and meaning, perhaps now and then too decided in her judgment, seeing the distinction between right and wrong too clearly, and entertaining a supreme, though gentle contempt for the trimmings and compromises, as well as for the fusses and agitations of the ordinary world, Mary felt herself to have plunged all at once into the midst of those agitations at a single step. She was anxious, timorous, yet rash, faltering even in opinion, hesitating, vacillating, she who had been so decided and so calm. Her feelings were all intensified; the chords of her nature tightened, as it were, vibrating to the lightest touch. And at the same time, which was strange enough, while thus the little circle, in which she stood, became full of such intense, unthought-of interest, the world widened around her as it had never widened before; into darknesses and silences indeed-but still with an extended horizon which expanded her heart. John was there in the wide unknown, which stretched round this one warm lighted spot, wandering she knew not where, a solitary man. She had never realised him so before; and not only John, but thousands like him, strangers, wanderers, strugglers with fate. The sudden breath of novelty, of enlightenment expanded her heart like a sob. These silent distances were dark; but yet there was the sense of space in them, and life and pity. Her composure, her satisfaction, her tranquillity, fled from her; but how much greater, more real and true, more penetrating and actual became her existence and the world. And all this was produced, not by any great mental enlightenment, any sudden development of character, but by the simple fact that two small helpless creatures had been put into her hands, and made absolutely dependent upon her. This was all; but the whole world could not have been more to Mary. It changed her in every way. She who had been so rooted in her place, so absorbed in her occupations, would have relinquished all, had it been necessary, and gone out solitary into the world for the children. Could there be any office so important, any trust so precious? This which was the vulgarest commonplace, yet highflown, sentiment on the lips of Mrs. Pennithorne became all at once, in a moment, the leading principle of Miss Musgrave's life.

But she had to undergo various petty inconveniences from the curiosity of her neighbors, and their anxiety to advise her as to what she should do in the "trying circumstances." What could she know about children? Mrs. Pen for one, thought it very important to give Miss Musgrave the benefit of her advice. She made a solemn visit to inspect them, and tell her what she ought to do. The little boy, she felt sure, was delicate, and would require a great deal of care; but the thing that troubled Mrs. Pennithorne the most was that Miss Musgrave could not be persuaded to put on mourning for her brother's wife. Notwithstanding that it was, as Mary pleaded, five years since she died, the vicar's wife thought that crape would be a proof that all "misunderstandings" were over, and would show a Christian feeling. And when she could not make this apparent to Miss Musgrave, she did all she could to impress it upon her husband, whom she implored to "speak to"-both father and daughter-on the subject. Most people would have been all the more particular to put on crape, and to wear it did not announce this as the object of

deep, because there had been "misunderstandings." "Misunderstandings!" cried Mr. Pen, whose mind, however, was much relieved by this word, for he had been, he feared, too confidential on the subject; but, thank Heaven, she had not understood. Either he must have been more prudent than he thought; or else he must have done it so cleverly as to leave a very mild impression on his wife's mind. It was not, however, he who spoke to Miss Musgrave, but she who spoke to him on this important subject; and what she said somewhat bewildered the vicar, who could not fathom her mind in this respect.

"Emily thinks we should put on mourning," she said. "And, do you know, I really believe that is the reason that poor John is so much more in my thoughts?"

"What - the mourning?" the vicar

asked faltering.

"Her death. Hitherto the idea of one has been mingled with that of the other. Now he is 'John;' everything else has melted away; there is nothing but himself to think of. He has never been only John before. Do you know what I mean, Mr. Pen?"

The vicar shook his head. He wondered if this could be a touch of feminine jealousy, knowing that even Mary was not perfect, and this gave him a mo-

mentary pang.

"I don't suppose that I could feel so; -I was very fond of John-but I, of course, could not be jealous-I mean of his love for one unworthy-

" How do we know even that she was unworthy? It is not that, Mr. Pen. But she was nothing to us, and confused him in our minds. Now he is himself—and where is he?" said Miss Musgrave with tears in her eyes.

"In God's hands-in God's hands, Miss Mary! and God bless him wherever he is-and I humbly beg your pardon," cried Mr. Pen, with an excess of emotion which she scarcely understood. His feelings were almost too warm Mary

thought.

And as the news got spread through those invisible channels which convey reports all over the country, many were the visitors that came to the Castle to see what the story meant, though they

their visit. Among them, the visit most important was that of Lady Stanton, who had been Mary's rival in beauty when the days were. They had not been rivals between themselves, but warm friends, in their youth and day of triumph; but events had separated the two girls, and the two women rarely met, and had outgrown all acquaintance; for Lady Stanton had been involved, almost more immediately than Mary Musgrave, in the tragedy which had so changed life at Penninghame, and this had changed their relations like everything else. She came in with a timid eagerness and haste, growing red and growing pale, and held out her hands to her old friend.

"We never quarrelled," she said; "why should we never see each other?

Is there any reason?"

"No reason," said Miss Musgrave, making room upon the sofa beside her. But such an unexpected appeal agitated her, and for the moment she could not satisfy herself as to the object of this visit. Lady Stanton, however, was of a very simple mind, and could not conceal

what that object was.

"Oh, Mary," she said, the tears coming into her eyes, "I heard that John's children had come home. Is it true? You know I always took an interest-" And here she stopped, making a gulp of some emotion which, to a superficial spectator, might have seemed out of place in Sir Henry Stanton's wife. She had grown stout, but that does not blunt the feelings. "I should like to see them," she said, with an appeal in her eyes which few people could withstand. And Mary was touched too, partly by this sudden renewal of an old love, partly by the thought of all that had happened since she last sat by her old companion's side, who was a Mary too.

"I cannot bring them here," she said, "but I will take you to the hall to see them. My father likes them to be kept in their own part of the house."

"Oh, I hope he is kind to them!" said Lady Stanton, clasping her white dimpled hands. "Are they like your family? I hope they are like the Musgraves. But likenesses are so strange-mine are not like me," said the old beauty, plaintively. But perhaps the trouble in her face was less on account of her own private trials

Musgrave's children should have the likeness of another face of which she could not think with kindness. There was so little disguise in her mind, that this sentiment also found its way into words. "Oh, Mary," she cried, "you and I were once the two beauties, and everybody was at our feet; but that common girl was more thought of than either you

"Hush!" said Mary Musgrave, putting up her hand; "she is dead."

"Is she dead?" Lady Stanton was struck with a momentary horror; for it was a contemporary of whom they were speaking, and she could not but be conscious of a little shiver in her own welldeveloped person, to think of the other who was clay. "That is why they have come home?" she said, half under her breath.

"Yes, and because he cannot carry them about with him wherever he goes.

"You have heard from him, Mary? I hope he is doing well. I hope he is not -very heart-broken. If you are writing you might say I inquired. He might like to know that he was remembered; and you know I always took-an inter-

"I know you always had the kindest

heart.'

"I always took an interest, notwithstanding everything; and-will he come home? Now surely he might come home. It is so long ago; Sir Harry thinks no one would interfere."

"I cannot say anything about that, for I don't know," said Miss Musgrave; "he does not say. Will you come and see the children, Lady Stanton?"

"Oh, Mary, what have I done that you should call me Lady Stanton? I have never wished to stand aloof. It has not been my doing. Do you remember what friends we were? and I couldn't call you Miss Musgrave if I tried. When I heard of the children I thought this was an opening," said Lady Stanton, fal-tering a little. She told her little fib, which was an innocent one; but she was true at bottom and told it ill; and what difference did it make whether she sought the children for Mary's sake, or Mary for the children's? Miss Musgrave accepted her proffered embrace with kindness, yet with a smile. She was touched n this respect than out of alarm lest John by the emotion of her old friend, and by the remnants of that "interest" which will and impulse) which rose above the had survived fifteen years of married life, and much increase of substance. Perthe emotion slightly improper. But poor John had got but hard measure in the world; and a little compensating faithfulness was a salve to his sister's feelings. She led her visitor down stairs, and through the narrow passage, in all her wealth of silk and amplitude of shadow. Mary herself was still as slim as when they had skimmed about these passages together; and she was Mary still; for once in a way she felt herself not without some advantage over Sir Harry's wife.

Nello was standing full in the light when the ladies went into the hall, and he it was who came forward to be caressed by the pretty lady, who took to him all the more warmly that she had no boys of her own. Lady Stanton fairly cried over his fair head, with its soft curls, "What a little Musgrave he is," she cried; "how like his father! I cannot help being glad he is like his father." But when this vision of splendor and beauty, which Lilias came forward to admire, saw the little girl, she turned from her with a slight shiver. "Ah!" she cried, retreating, "is that-the little girl?" And the sight silenced her, and drove her away.

CHAPTER VIII.

LADY STANTON.

LADY STANTON drove home from that visit with her heart and her eyes full. She was not intellectual nor even clever, but a soft creature, made up of feelings easily touched, not perhaps very profound, nor likely to obscure to her the necessary course of daily living, but still true enough and faithful in their way. She might have been able to make sacrifices had she come in the way of them or found them necessary, but no such chance of moral devotion had come to her; nor had any teachings of experience or philosophy of middle age, such as works upon the majority of us, hardened her soft heart, or swept away the little romantic impulses, the quick sensibilities of youth. A nature so fresh indeed was scarcely compatible with much exercise of the intellectual faculties at all. Lady Stanton rarely read, and never under any circumstances read anything (of her own

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most primitive and familiar elements; but on the other hand the gentle sentihaps a harsher judge might have thought mentalities which she did read went straight to her heart. She thought Mrs. Hemans the first of poets, and cried her eyes out over Mr. Dickens's "Little Nell." Anything about an unhappy love, or about a dead child, would move her more than Shakspeare, and she shed tears as ready as the morning dew. Practically, it is true, she had gone through a certain amount of experience like other people, and her everyday life was more or less affected by what she had come through; but in her heart Lady Stanton was still the same Mary Ridley, whose gentle being had been involved in the wildest of tragic stories, even though she had come down to so commonplace a daily routine now. That story, so long past, took the place in her being of all the poetry and romance which the most of us get glorified from the hands of genius, and all her love came from that one personal episode, which was unparalleled in life as she knew life. When she read one of the novels which pleased her, she would compare the situations in it with this; when she lingered over the vague melodious verses which represented poetry to her, there was always a little appropriation in her heart of their soft measures to the dim long past emergency. And now here it was brought back upon her by every circumstance that could bring the past near. Her love-was it her love that was recalled to her? But then there was no love in it properly so called. She had taken an interest in John Musgrave, her friend's brotheralways had taken an interest in him; but she had no right to do so at any time, being betrothed to young Lord Stanton, who, for his part, had forgotten her for the sake of that dressmaker's girl at Penninghame, to whom John Musgrave too had given his heart. What a complication it was! Mary Ridley, who had a pretty property close to his, had been destined for Lord Stanton from the beginning of time, and the boy and girl had lightly acquiesced, and had been happy enough in the parental arrangement. They had liked each other well enough -they had been as gay as possible in the light-heartedness of their youth, and had taken this for happiness. Why should not they be happy? they were exactly suited to each other. She was the prettiest girl in the county (except the other Mary), and he was proud of her sweet looks, and fond of her, certainly fond of her; whereas she, unawakened, undisturbed, notwithstanding the interest she had always taken in John Musgrave, would have made him the most affectionate and charming wife in the world. Thus the early story had flowed on all smoothness and sunshine, the flowers blooming, the sun shining: until one fatal day, young Lord Stanton riding through Penninghame village on his way to the old Castle, had seen Lily, Miss Price's assistant, at the window of the dressmaker's parlor. Fatal day! full of all the issues of death.

It is needless to inquire what manner of woman this Lily was, for whom these two men lost themselves and their existence. She did not know of any tragedy likely to be involved, but brushed about in her homely village way through these webs of fate, twisting the threads innocently enough, and throwing the weaving into endless confusion. Whether Lord Stanton was murdered by John Musgrave, as many people thought at first, or killed accidentally in a hot, sudden encounter, as most people believed now, was a thing which perhaps would never be cleared up. The guilty man (if he was guilty) had paid the penalty of his deed in exile, in poverty, in misery, ever since. His life had been as much broken off at that point as Stanton's was who died-and the two families had been equally plunged into woe and mourning; though indeed it was the Musgraves who suffered most by reason of the stigma put upon them, by the shame of John's flight and of his marriage, and by the fact that he was still a criminal pursued by justice, though justice had long slackened her pursuit. As for the Stantons there was nobody to mourn much. Aunts and uncles and cousins console themselves sooner than fathers and mothers, and the boy brother, who had succeeded to the title, had been too young to be capable of sustained sorrow. Everybody at that time had sympathised with the young bride who had lost her future husband, and her coronet, and all the joys of life in this sudden and miserable way, for there was no concealing what the life. It was but a poor fate for the beau-

cause of the quarrel was, and that Lord Stanton had been unfaithful to the beautiful Mary. Nobody knew, however, the complication which gave her a double pang, the knowledge that not only the man who was her own property, her bretrothed husband, but the man in whom, innocently in girlish simplicity, she had avowed herself to "take an interest," had preferred to her the village Lily, who was nobody and nothing, who had not been blameless between them, and whom everybody condemned. Everybody condemned: but they loved her. Both of them! this secret and poignant addition to her trial Mary Ridley never confided to any one, but it still thrilled through and through her at any allusion to that old long past tragedy. Both of them !-- the man whose best love was due to her, and the man who had caught her own girlish shy eyes, all unaware to either, somehow innocently, unavowedly, in such a visionary way as harmed no one; both! It was hard. She wept for them both tenderly, abundantly, for the one not less than the other; and a littlewith a cry in her heart of protestation and appeal-for herself, put aside, thrown over for this woman who was nothing, who was nobody, yet who was better beloved than she. All this had swelled up in Lady Stanton's heart when she saw the little girl who had Lily's face. She had been unable to restrain the sting of old wonder and pain; the keen piercing of the old wound which she had felt to her heart. Both of them! and here a little ghost of this Lily, her shadow, her representation had come to look her in the face. She cried as she drove back that long silent way by herself to Elfdale. It was seldom she had the chance of being so long alone, and there was a kind of luxury about it, not unmingled with compunction and a sense of guilt.

For it still remains to be told how Mary Ridley came to be Lady Stanton, although Lord Stanton, who was the betrothed husband of her youth, had been killed, and all that apparently smooth and straightforward story had ended in grief and separation. She had married after some years a middle-aged cousin of her dead lover, Sir Henry Stanton, who had not long before come back from India where he had spent most of his tiful Mary. Sir Henry had left his career and a full accomplished life behind him, when he first came to settle at Elfdale to the passive existence of a gentleman in the country, who could not be called a country gentleman. He had been married and had children, a family of sons and daughters, and had only a second chapter of less vivid meaning, a sort of postscriptal life, to offer her. Why she had accepted him nobody could well say,-but she made him a good wife, kind, smiling, always gentle, though sadly put to it now and then to preserve unbroken the sweet good-temper with which nature had gifted her. So fair and sweet as she was, to get only the remains of a man's heart after all, to be made use of as their chaperon and caretaker by his big, unlovely daughters; to have her own children, two dainty, lovely, fairy girls, kept in the background,no more than "the little ones"-of no account in the house-all these things were somewhat trying, and a strange reversal of all that life had seemed to promise her, and all that had been indicated by the early worship which surrounded her youth. But perhaps few women could have carried this inappropriate fate so well. All those contradictions of circumstances, all those travesties of what might have been, met with no gloom, or sourness of disappointment in her. The very fact that she was Lady Stanton carried with it a certain aggravation, a parrot-like adhesion to the letter, and change of the spirit, such as had been in the promises made to Macbeth. Mary might have thought herself the victim of a perverse fate, keeping the word of promise to the ear and breaking it to the heart, had she been perversely disposed-but instead of that all her thoughts were that she had taken an unfair advantage of Laura and Lydia, in not telling them where she was going, that they might have come with her had they been disposed. She had stolen a march upon them; they would think it unkind. But then she could not have gone to Penninghame had Laura and Lydia been with her. Though they were so much less concerned than she bad been, they kept up the Stanton feud with the Musgraves. They had no "interest" in John—on the contrary, they were of the few who still believed that he had

"murdered" Lord Stanton—and would have had him hanged if he ever returned to England. They would not have entered the house, or permitted any kind inquiries in their presence. And therefore it was that she had stolen away without letting them know, and was at present conscious—in addition to all the jumble of emotions in her heart—of a

certain prick of guilt.

The Stantons were a great county family as well as the Musgraves, but in a very different way. When the Musgraves had been at their greatest, the Stantons had been nobody. They were nothing more than persistent, thrifty folk at first, adding field to field, building on ever a new addition to their old house. Then wealth had come, and then local importance; and last of all celebrity. The first who brought anything like fame to the name, and introduced the race to the knowledge of the world, was a soldier, a general under the Duke of Marlborough, who got a baronetcy and a reputation, and had a handsome new coat of arms invented for him - very appropriately gained indeed, on the field of battle, just as the augmentation of the Musgraves' blazon had been gained, but a few hundred years too late unfortunately, and therefore not telling for nearly so much as if it had been won in the fifteenth century. The next man was a lawyer, who so cultivated that profession that it brought his son, in the reign of the Georges, to the bench, and a peerageand since that time the family had taken their place among the magnates of the North Country. Young Walter Lord Stanton was a much greater man than John Musgrave, though not half so great a man in one sense of the word. Two or three generations, however, tell just as much upon the individual mind as twenty, and the young peer was conscious of all his advantages over the commoner, without any sense of inferiority in point of race. And now the other Lord Stanton, Geoffrey, who had succeeded that unfortunate young man, was the greatest personage of his years in the district, regarded with interest by all his neighbors and with more than interest by some; for was it not in his power to make one of his feminine contemporaries, however humble she might be by birth, and however poor in this world's goods, a great

lady?-and so long as human nature remains as it is, this cannot cease to be a very potent attraction. Indeed the wonder is that young women should not be altogether demoralised by the perpetual recurrence of such chances of undeserved, unearned elevation. Young Lord Stanton could do this. He could give fine houses and lands, a title and all the good things of this earth to his cousin Laura, or his cousin Lydia, or any other girl in the county that pleased him. Therefore it cannot be wondered at if his appearance fluttered the dovecotes with sentiments as powerful and more pleasant than those which fill the nests at the appearance of predatory hawk or eagle. But any such flutter of feeling was held in Elfdale to be an unwarrantable impertinence on the part of the other ladies of the county. Long ago, at the time when at five years old he had succeeded to his stepbrother, there had been a tacit family understanding to the effect that one of Sir Henry's daughters should be the young lord's wife. Sir Henry, though old enough to have been the father of his murdered cousin, would have been his heir but for Geoff-and it was universally allowed to be hard upon him that when such an unlikely chance happened, as that young Lord Stanton should die, there should be this boy coming in the way forestalling his claim. Nobody had wanted that child who was suddenly turned into a personage of so much importance-not even his father, who had married with a single-minded idea of being comfortable in his own person, and who was much annoyed by the prospect of "a family"-which was happily, however, cut short by his own speedy death. When therefore Walter Lord Stanton was killed, it was very generally felt that Sir Henry had a real grievance in the existence of the little step-brother, who was in the way of everybody except his poor mother, whom the old lord had married to nurse him, and who had taken the unwarrantable liberty of adding little Geoffrey to the family. Poor little Geoff! he was bullied on all hands so long as his brother lived, and then what a change came over his life and that of his mother, who was as light-haired, and pale and shy as the bov was! Great good fortune may change even complexion, and Geoff as he grew

to be a man was no longer pale. But Sir Henry never quite got over the blow dealt him by this succession. He had not resented Walter. Walter was so to speak the natural heir—and nobody expected him to die; but when he did die, so out of all calculation, to think there should be that boy! Sir Henry did not get over it for years—it was a positive wrong not to be forgotten.

Accordingly, as a small compensation to his injured feelings, all the family had tacitly decided that Geoff should marry one of his cousins. This, it is true, was but a very small compensation, for Sir Henry was not the kind of parent who lives in his children, and is indifferent to his own glory and greatness. Even now, fifteen years after that event, he was not an old man, and it made up very poorly for his personal disappointment that Laura or Lydia should share the advancement of which he had been de-prived. Still it was so understood. Geoff paid many holiday visits at Elfdale, though there was no particular friendship between Sir Henry and the widowed Lady Stanton, who was Geoff's guardian as well as his mother (to distinguish this lady she was called Maria, Lady Stanton among the kindred, and preferred that title), and things were going smoothly enough between the young people. They liked each other, and had no objection to be together as much as was possible, and already the sisters had settled be-tween them "which of us it is to be." This Lydia, who was the most strongminded, had thought desirable from the moment when she had become aware what was intended. "It does not matter at present," she said, "we are none of us in love, and one is just as good as another: but we had better draw lots, or something-or toss up, as the boys do." And what the mystic ordeal had been which decided this question we are unable to say, but decided it was in favor of Laura, who was the prettiest, and only a year younger than Geoff. Lydia, as soon as the die was cast, constituted herself the guardian of her sister's fortunes so far as the young lord was concerned, and made herself into a quaint and really pretty version of a matchmaking mother on Laura's behalf. Thus it will be seen that it was into the very heart of the opposite faction that Lady Stanton drove home with those tears in her soft eyes, and all that commotion of old thoughts in her heart. If they could have seen into it and known that it was the image of John Musgrave that had roused that commotion, what would these girls have said, towards whom she felt so guilty as having stolen a march upon them? "The murderer!" they would have cried with a shriek of horror. Lady Stanton could not, it is clear, have taken them to Penninghame with her, and surely she had a right to use her own horses and carriage; but still she felt guilty as she subdued, with all the effort she could make, the excitement in her heart. When she went in, she retired at once up stairs, and announced herself, through her maid. to have a headache, and had a cup of tea in her own room, to which her own children, little Fanny and Annie, a pair of inseparables, came noiselessly like two doves on the wing. Annie and Fanny liked nothing in the world so much as to get mamma to themselves like this, in the stillness of her room, with everybody else shut out. One was ten and the other eleven; they were about the same height, had the same flowing curly locks of light brown hair, the same rose-tinted faces, walked in each other's steps, or carpeted stairs and passages, together, always in sudden soft flights, like doves, as we have said, on the wing. "Is your head very bad, mamma?" they said; and the gentle hypocrite blushed as she replied. No, it was not very bad; a little quiet would make it quite well. They took off her "things" for her, and brought her her soft white dressinggown, in which she looked like the mother of all the doves, and let down her hair, which was not much darker, and quite as abundant as their own, and gave her her cup of tea thus, soothing every tingling nerve; and by this time Lady Stanton's head was not bad at all, though now and then one of them would administer eaude-cologne or rosewater. She told them of the children she had seen-little orphans who had no mother-and the two crept closer to her, to hear of that awful, incomprehensible desolation, each clasping an arm of hers with two small, eager hands. To be without a mother! Annie and Fanny held their breath in reverential silence and pity; but wondered a lit-

tle that it was the little boy (" called Nello-what a funny name!") that mamma spoke of, not the girl, who was ten (" just the same age as me.")

But not even the sympathy of her children, and the trance of interest which kept them breathless, could make Lady Stanton speak of the little girl. Her mother's face! that face which had taken the best of everything in existence from Mary Ridley-how could Lady Stanton speak of it? She made some efforts to get over the feeling, but not with much success. But the rest restored her, and enabled her to appear, her headache quite charmed away, and her nerves still, at dinner. She took a little more care with her toilette than usual, by way of propitiation to the angry gods. And though Laura and Lydia were not much short of twenty years younger than their step-mother, it would have been an indifferent judge who had turned from her to them, even in the fresh bloom of their youth. She came down stairs very conciliatory, ready to make the best of everything, and to make amends to them for all disloyal thoughts, and for having cheated them of their drive.

"I hope your head is better, my lady," said Laura, "We have been wondering rather flew about their little world of all the afternoon wherever you had gone."

These girls had a certain strain of vulgarity in them somehow which could not be quite eradicated from their speech.

"I went out for a drive as usual," said Lady Stanton. "I thought I heard you say that you meant to walk."

"Oh, yes; we wanted to walk to the village to settle about the school children," said Laura; and Lydia added: "But I am sure we never said so," and looked suspiciously at her stepmother.

"I went by the Langdale woods, and all the way to Penninghame water," said the culprit, very explanatory. lake looked so cold. I should not like to live near it. It chills all the landscape, and I am sure puts dreary thoughts into people's heads. And as I was there, Henry," she added, addressing her husband, "I did what you will think an odd thing." Lady Stanton's bosom heaved a little, and her breath came quick. It would have been far easier to say nothing about it; but then she knew by experience that everything gets found out.

She made a momentary pause before the confession which she tried to treat so lightly. "I ran in for a moment to the old Castle and saw Mary—Mary, you know. We were great friends, she and I, when we were young; and it was such a temptation passing the old place."

"What whim took you near the old place?" said Sir Henry, gruffly. "I cannot think of any place in the world that

should lie less in your way."

"Well, that is true," she said, breathing a little more freely now that the worst was told; "and the proof of it is that I have not been there for years."

"I hope it will be still longer before you go again," said her husband.

He did not say any more because of the servants, and because he had too much good sense to do or say anything that would lessen his wife's importance; but he was not pleased, and this troubled her, for she had a delicate conscience. She looked at him wistfully, and was imprudent enough in her anxiety to pursue the subject, and make bad worse.

"It is strange to see an old friend whom you have known when you were young, after so many years," she said; "though Mary is not so much altered as I am. You remember her, Henry? She was always so pretty; handsomer than—

any one I know."

It was on her lips to say "handsomer than ever I was," which was the real sentiment in her mind, partly dictated by semi-guilt and humility produced by the consciousness of having grown stout, a kind of development which troubles women. She was very deeply aware of this, and it silenced all the claims of vanity. She had lost her figure; whereas Mary was still slim and straight as an arrow. Whatever might have been once, there was now no comparison between the two.

"Do you mean Miss Musgrave," cried the girls, one after the other. "Miss Musgrave! that old creature—that old

maid-that man's sister?"

"She is no older than I am," said Lady Stanton, with a flush on her face. "She was my dear friend in the old days. She is beautiful still, as much as she ever was, I think, and good; she has always been good."

"That will do, I think," said Sir Henry, interposing. "We need not discuss that family; but I think you will see, my dear, that there could not be much pleasure in any intercourse at this time of day—whatever might have been the case when you were young."

"Intercourse—there could never be any intercourse," cried Lydia, coming to the front. "Fancy, papa! intercourse with such people—after all that has happened. That would be tempting Providence; and it would be an insult to

Geoff."

"Let Geoff take care of his own affairs," said Sir Henry, angrily; and he gave a forcible twist to the conversation, and threw it into another channel; but Lady Stanton was very silent all the evening afterwards. She had wanted to conciliate, and she had not succeeded; and how indeed could she, among her hostile family keep up any intercourse with her old friend?

CHAPTER IX.

AT ELFDALE.

NEVERTHELESS this meeting could not be got out of Lady Stanton's mind. She thought of it constantly; and in the stillness of her own room, when nobody but the little girls were by, she talked to them of the children, especially of little Nello who had attracted her most. What a place of rest and refreshment that was for her, after all her trials with Laura and Lydia, and the seriousness of Sir Henry, who was displeased that she should have gone to Penninghame, and showed it in the way most painful to the soft-hearted woman, by silence, and a gravity which made her feel her indiscretion to her very heart. But notwithstanding Sir Henry's annoyance, she could not but relieve her mind by going over the whole scene with Fanny and Annie, who knew, without a word said, that these private talks in which they delighted, in which their mother told them all manner of stories, and took them back with her into the time of her youth, and made them acquainted with all her early friends-were not to be repeated, but were their own special privilege to be kept for themselves alone. They had already heard of Mary Musgrave, and knew her intimately, as children do know the early companions of whom an indulgent mother tells them, to satisfy their boundless appetite for narrative. "And

what are they to Mary?" the little girls asked, breathless in their interest about these strange children. They had already been told; but the relationship of aunt did not seem a very tender one to Annie and Fanny, who knew only their father's sisters, old ladies to whom the elder girls, children of the first marriage, seemed the only legitimate and correct Stantons, and who looked down upon these little interlopers as unnecessary. "Only their aunt!—is that all?"

They were not in Lady Stanton's room this time, but seated on an ottoman in the great bow-window, one on either side of her. Laura and Lydia were out; Sir Henry was in his library; the coast was clear; no one was likely to come in and dismiss the children with a sharp word, such as-" Go away, little girls-there is no saying a word to your mother while you are there;" or "The little ones again! When we were children we were kept in the nursery." The children were aware now that when such speeches were made, it was better for them not to wait for their mother's half-pained, halfbeseeching look, but to run away at once, not to provoke any discussion. They were wise little women, and were, by nature, of their mother's faction in this house, where both they and she, though she was the mistress of it, were more or less on sufferance. But at present everybody was out of the way. They were ready to fly off, with their pretty hair fluttering like a gleam of wings, should any of their critics appear; but the girls had gone a long way, and Sir Henry was very busy. It was a chance such as seldom occurred.

"All? when children have not a mother, their aunt is next best; sometimes she is even better—much better," said Lady Stanton, thinking in her heart that John's wife was not likely to have been any great advantage to her children. "And Mary is not like any one, you know. She is a beautiful lady—not old, like Aunt Rebecca—though Aunt Rebecca is always very kind. I hope you have not forgotten those beautiful sashes she gave you."

'I don't think very much of an aunt," said Fanny, who was the saucy one, with a shrug of her little shoulders. "It must be different," said Annie, hugging her mother's arm. They were not impressed

by the happiness of those poor little stranger children in being with Mary. "Has the little girl got no name, mamma—don't you know her name? You say Nello; but that is the boy; though it is more like a girl than a boy."

"It is German—or something—I don't remember. The little girl is called Lilias. Oh, yes, it is a pretty name enough, but I don't like it. I once knew one whom I did not approve of——"

"We knew," said Fanny, nodding her head at Annie, who nodded back again; "Mamma, we knew you did not like the little girl."

"I! not like her! oh, children, how can you think me so unjust? I hope I am not unjust," cried Lady Stanton, almost with tears. "Mary is very proud of her little niece. And she is very good to little Nello. Yes, perhaps I like him best, but there is no harm in that. He is a delightful little boy. If you could have had a little brother like that—"

"We have only—big brothers," said Annie, regretfully; "that is different."

"Yes, that is different. You could not imagine Charley with long, fair curls, and a little tunic, could you?" This made the children laugh, and concealed a little sigh on their mother's part; for Charley was a big dragoon, and Lady Stanton foresaw would not have too much consideration, should they ever require his help, for the little sisters whom

he undisguisedly felt to be in his way.
"I wonder if she wishes he was a little girl."

"I wonder! How she must want to have a sister! A little brother would be very nice, too; we used to play at having a little brother; but it would not be like Fanny and me. Does she like being at the Castle, mamma?"

It troubled Lady Stanton that they should think of nothing but this little girl. It was Lilias that had won their interest, and she could not tell them why it was that she shrank from Lilias. "They have left their poor papa all alone and sad," she said, in a low voice. "I used to know him too. And it must make them sad to think of him so far away."

It was the children's turn now to be puzzled. They were not on such terms of tender intimacy with their father as were thus suggested, but, on the whole,

were rather pleased than otherwise when he was absent, and did not follow him very closely with their thoughts. They were slightly humbled as they realized the existence of so much greater susceptibility and lovingness on the part of the little girl in whom they were so much interested, than they themselves possessed. How she surpassed them in this as well as in other things, though Annie was older than she! She talked German as well as English (if it was German; their mother was not clear what language it was)-think of that! So perhaps it was not wonderful that she should be so much fonder of her papa. And a mo-ment of silence ensued. Lady Stanton did not remark the confused pause in the minds of her children, because her own mind was filled with wistful compassion for the lonely man whom she had been thinking of more or less since ever she left Penninghame. Where was he, all alone in the world, shut out from his own house, an exile from his countryeven his children away from him, in whom perhaps he had found some comfort?

This momentary silence was interrupted abruptly by the sound of a voice. "Are you there, Cousin Mary? and what are you putting your heads together about?"

At this sound, before they found out what it was, the children disengaged themselves suddenly each from her separate clinging to her mother's arm, and approached each other as if for flight; but, falling back to their places, when they recognised the voice, looked at each other, and said both together, with tones of relief, "Oh, it's only Geoff!"

Nothing more significant of the inner life of the family, and the position of these two little intruders, could have

Geoff came forward with his boyish step and voice in all the smiling confidence of youth. "I thought I should startle you. Is it a story that is being told, or are you plotting something? Fanny and Annie, leave her alone for a moment, It is my turn now."

"O Geoff! it is about a little girl and a boy—mamma will tell you too if you ask her; and there's nobody in. We thought at first you were papa, but he's so busy. Come and sit here."

Geoff came up, and kissed Lady Stanton on her soft, still beautiful cheek. He was a son of the house, and privileged. He sat down on the stool the children had placed for him. "I am glad there's nobody in," he said. "Of course the girls will be back before I go; but I wanted to speak to you—about something."

"Shall the children go, Geoff?"

"Fancy! do you want them to hate me? No, go on with the story. This is what I like. Isn't it pleasant, Annie and Fanny, to have her all to ourselves? Do you mind me?"

"Oh, not in the least, Geoff—not in the very least. You are like—what is he like, Annie?—a brother, not a big brother like Charley; but something young, something nice, like what mamma was telling us of—a little brother—grown up—"

"Is this a sneer at my height?" he said; "but go on, don't let me stop the story. I like stories—and most other pleasant things."

"It was no story," said Lady Stanton.
"I was telling them only of some children:—you are very good and forgiving, Geoff—but I fear you will be angry with me when you know. I was—out by myself—and notwithstanding all we have against them, I went to see Mary Musgrave. There! I must tell you at once, and get it over. I shall be sorry if it annoys you; but Mary and I," she said, faltering, "were such friends once, and I have not seen her for years."

"Why should I be annoyed—why should I be angry? I am not an avenger. Poor Cousin Mary! you were out—by yourself!—was that your only reason for going?"

"Indeed it is true enough. It is very seldom I go out without the girls; and they—feel strongly, you know, about that."

"What have they to do with it? Yes, I know; they are plus royalistes que le roi. But this is not the story."

"Yes, indeed it is, my dear boy. I was telling Annie and Fanny of two poor children. They belong to a man who is —banished from his own country. He did wrong—when he was young—oh so many, so many years ago!—and he is still wandering about the world without a home and far from his friends. He was

young then, and now—it is so long ago;
—ah, Geoff, you must not be angry with
me. The little children are with Mary.
She did not tell me much, for her heart
did not soften to me as mine did to her.
But there they are; the mother dead
who was at the bottom of it all; and
nobody to care for them but Mary; all
through something that happened before
they were born."

Lady Stanton grew red as she spoke, her voice trembled, her whole aspect was full of emotion. The young man shook his head.

"I suppose a great many of us suffer for harm done before we were born," he said gravely. "This is no solitary in-

stance."

"Ah, Geoff, it is natural, quite natural that you should feel so. I forgot how deeply you were affected by all that happened then."

"I did not mean that," he said gravely. His youthful face had changed out of its light-hearted calm. "Indeed I had heard something of this and I wanted to speak

"Run away, my darlings," said Lady Stanton; "go and see what—nurse is about. Make her go down with you to the village and take the tea and sugar to the old women in the Almshouses. This is the day—don't you remember?"

"So it is," said Annie. "But we did not want to remember," said Fanny, "we liked better to stay with you."

However, they went off, reluctant but obedient. They were used to being sent away. It was seldom their mother who did it willingly—but everybody else did it with peremptory determination—and the little girls were used to obey. They untwined themselves from her arms to which they had been clinging, and went away close together, with a soft rush and sweep as of one movement.

"There go the doves," said Geoff looking after them with kind admiration like that of a brother. It pleased Lady Stanton to see the friendly pleasure in them which lighted the young man's eyes. Whoever married him he would always, she thought, be a brother to her neglected children, who counted for so little in the family. She looked after them with that mother-look, which, whether in joy or sorrow, is close upon tears. Then she turned to him with

eyes softened by that unspeakable tenderness.

"Whatever you wish," she said. "Tell me, Geoff; I am ready to hear."

"I am as bad as the rest. You have to send them away for me too."

"There is some reason in it this time. If you have heard about the little Musgraves you know how miserable it all is," said Lady Stanton. "The old man will have nothing to say to them. He lets them live there, but takes no notice—His son's children! And Mary has everything upon her shoulders."

"Cousin Mary, will it hurt you much to tell me all about it?" said the young man. "Forgive me, I know it must be painful; but all that is so long over and everything is so changed—"

"You mean I have married and forgotten," she said, her lips beginning to

"I scarcely remember anything about it," said Geoff, looking away from her that his eyes might not disturb her more, "only a confused sort of excitement and wretchedness, and then a strange new sense of importance. We had been nobodies till then—my mother and I. But I have heard a few things lately. Walter—will it pain you if I speak of him?"

"Poor Walter!—no. Geoff, you must understand that Walter loved somebody else better than me."

She said this half in honest avowal of that humiliation which had been one of the great wonders of her life, partly in excuse of her own easy forgetfulness of him

"I have heard that too, Cousin Mary, with wonder; but never mind. He paid dearly for his folly. The other—"

"Geoff," said Lady Stanton with a trembling voice, "the other is living still, and he has paid dearly for it all this time. We must not be hard upon him. I do not want to excuse him—it would be strange if I should be the one to excuse him; but only—"

"I am very sorry for him, Cousin Mary. I am glad you feel as I do. Walter may have been in the wrong for anything I know. I do not think it was murder."

"That I am sure it was not! John Musgrave was not the man to do a murder—oh, no, no, Geoff, he was not that kind of man!"

Geoff looked up surprised at her eager tone and the trembling in her voice.

"You knew him—well?" he said, with that indifferent composure with which people comment upon the past, not knowing what depths those are over which they skim so lightly. Could he have seen into the agitation in Lady Stanton's heart! But he would not have understood nor realised the commotion that was there.

"I always—took an interest in him," she said, faltering, and then she felt it her duty to do her best for him as an old friend. "I had known him all my life, Geoff, as well as I knew Walter. He was hasty and high-spirited, but so kind—he would have gone out of his way to help anyone. Before he saw that young woman everybody was fond of John."

"Did you know her too?"

"No, no; I did not know her. God forbid! She was the destruction of every one who cared for her," said Lady Stanton with a little outburst. Then she made an effort to subdue herself. "Perhaps I am not just to her," she said with a faint smile. "She was preferred to me, you know, Geoff; and they say a woman cannot forget that—perhaps it is true."

"How could he? was he mad?" Geoff said. Geoff was himself tenderly, filially in love with his cousin Mary. He thought there was nobody in the world so beautiful and so kind. And even now she was not understood as she ought to be. Sir Henry thought her a good enough wife, a faithful creature, perfectly trustworthy, and so forth. It was in this light that all regarded her. Something better than an upper servant, a little dearer than a governess. Something to be made use of, to do everything for everybody. She who, Geoff thought in his enthusiasm, was more lovely and sweet than the youngest of them, and ought to be held pre-eminent and sacred by everybody round her. This was not the lot that had fallen to her in life.

"So I am not the best judge, you see," said Lady Stanton with a little sigh. "In those days one felt more strongly perhaps. It all seems so vivid and clear," she added half apologetically, though without entirely realizing how much light these half confessions threw on her present state of less lively feeling, "that is the effect of being young—"

"I think you will always be young," he said tenderly; then added after a pause—" was it a quarrel about—the woman?——" He blushed himself as he said so, feeling the wrong to her—yet only half knowing the wonder it was in her thoughts, the double pain it brought.

"I think so. They were both fond of her; and Walter ought not to have been fond of her. John-was quite free. He was in no way engaged to any one. He had a right to love her if he pleased. But Walter interfered, and he was richer, greater, a far better match. So I suppose she wavered. This is my own explanation of it. They met then when their hearts were wild against each other, and there was a struggle. Ah Geoff! Has it not cost John Musgrave his life as well as Walter? Has he ever ventured to show himself in his own country since? And now their poor little children have come home to Mary; but he will never be able to come home.

"It is hard," said Geoff thoughtfully.
"I wish I knew the law. Fourteen years is it? I was about six, then. Could anything be done? I wonder if any-

thing could be done."

She put her hand on his shoulder with an affectionate caressing touch, "Thanks for the thought, my dear boy—even if nothing could be done—"

"You take a great deal of interest in

him, Cousin Mary?"

"Yes," she said quickly; "I told you we were all young people together; and his sister was my dear friend. We were called the two Maries in those days. We were thought—pretty," she said with a vivid blush and a little laugh. "You may have heard."

Geoff kissed the pretty hand which had been laid on his shoulder, and which was perhaps a little fuller and more dimply than was consistent with perfection. "I have eyes," he said, with a little of the shyness of his years, "and I have always had a right as a Stanton to be proud of my cousin Mary. I wonder if Miss Musgrave is as beautiful as you are; I don't believe it for my part—"

"She is far prettier—she is not stout," said Lady Stanton with a sigh; and then she laughed, and made her confession over again with a half jest, which did not make her regret less real, "and I have lost my figure. I have developed, as

people say. Mary is as slim as ever. Ah, you may laugh, but that makes a great difference; I feel it to the bottom of my heart."

Geoff looked at her with tender admiration in his eyes. "There has never been a time when I have not thought you the most beautiful woman in all the world," he said, "and that all the great beauties must have been like you. You were always the dream of fair women to me-now one, now the other-all except Cleopatra. You never could have been like that black-browed witch-

"Hush! boy. I am too old to be flattered now; and I am stout," she said with that faint laugh of annoyance and humiliation, just softened by jest. Geoff's honest praise brought no blush to her soft matronly cheeks, but she liked it, as it pleased her when the children called her "Pretty Mamma." They loved her the best, though people had not always done so. The fact that she had grown

stout did not affect their admiration. Only those who have known others to be preferred to themselves can realise what this is. After a moment's hesitation, she added in a low voice: "I wonder-will you go and see them? It would have a great effect in the neighborhood. 'Oh, Geoff, forgive me if I am saying too much; perhaps it would not be possible, perhaps it might be wrong in your position. You must take the advice of somebody more sensible, less affected by their feelings. Everybody likes you, Geoff, and you deserve it, my dear; and you are Lord Stanton. It would have a great effect upon the county; it would be almost clearing him-"

"Then I will go-at once-this very

day," said Geoff, starting up.

"Oh, no, no, no," she said, catching him by the arm, "first of all you must speak to-some one more sensible than me."

(To be continued.)

FRENCH NOVELS AND FRENCH LIFE.*

BY H. DE LAGARDIE.

In spite of all that has been written aux mœurs." Personally, we confess our and said-not without truth-about the inability to discover the usefulness of errors of public taste, it may be safely affirmed that when a book reaches its twenty-ninth edition it possesses considerable merit of some kind. It may be useful, instructive, clever, or simply amusing, but one of these things it must be, for even the work of the best known writer will not go beyond a certain limit of success without something more substantial than a name to recommend it. With the exception perhaps of usefulness, M. Daudet's novel possesses all the virtues we have enumerated,-we say perhaps, in deference to the opinion of those who hold that truth of any kind is always useful. Indeed a glance at the cover of the book reminds us that it has been couronné par l'Académie Française, and the title to such "crowning" is precisely the fact of being "un ouvrage utile

these pictures of bourgeois vice so unsparingly exposed, but the French Academy and the French public ought to know best, and these two great authorities have proclaimed in their several ways the morality of M. Alphonse Daudet's work.

It must be said that novels are judged in France, as regards their moral tendency, by singularly indulgent rules. They may be summed up thus:-The author has not held up vice to our admiration, or rendered virtue ridiculous and disagreeable; his bad people are not successful in the long run, or, if they are, they do not succeed, thanks to their badness; ergd, his book is worthy of being crowned. Judged by this lenient code, M. Daudet is undoubtedly entitled to a triumphant acquittal. He has certainly not rendered vice attractive. In his pages it has neither wit, grace, elegance, nor even gaiety, and Sidonie, his entirely bad heroine, the embodiment of unmitigated selfish vice, without one redeeming

Fromont Jeune et Risler Aine: Maurs Parisiennes, by Alphonse Daudet. Published under title of "Sidonie," by W. F. Gill & Co.,

point or even an amiable weakness, leads a life which seems to us only by a few shades less dull than that of her virtuous, long-suffering rival. The poetry of vice-if we may be excused so immoral an expression-is entirely absent. M. Daudet has painted good and bad bourgeois of both sexes, but the same prosaic atmosphere envelopes them all, and in this perhaps consists the perverting tendency of this well-meaning book. There can be no doubt that after reading it, the land of Bohemianism, with its surprises and its excitement, the varied land into which outcasts from the dull paradise of bourgeois respectability must wander forth, acquires a false prestige of romance when contrasted with the monotonous circle in which good Madame Fromont and bad Madame Risler suffer and sin.

When we have added that M. Daudet, in spite of his subject, has carefully avoided all those glowing descriptions and perilous scenes in which French novelists love to indulge, and that his book may lie on the drawing-room table, we shall have disposed of one part of our subject, which we are well aware. however, is not the one which chiefly interests English readers. The main attraction for them lies in the second title of the book, "Mœurs Parisiennes." Are these really Parisian manners? is the natural question of a foreigner. If the picture is not a likeness, it is worthless. We can safely affirm that it is not only a likeness, but a life-like photograph of one ugly aspect of French society-unflattering no doubt, as photographs mostly are, but cruelly real. And having said so much it is, we think, unnecessary to dwell on the story. Those whom our remarks would interest should turn to the volume itself, if they have not read it already. No one who has read it is likely to have forgotten it, and we would not spoil the pleasure of others.

A few words will suffice. M. Daudet's heroine is an irredeemably bad woman, selfish, ignorant, and totally unscrupulous. As a poor, vain, workinggirl, she is devoured with envy and all the vulgar longings of her kind. Her beauty and her cunning raise her to the bourgeois class, and she becomes the wife of an honorable man, the respected partner in a large house of business. But "la petite Chèbe," in becoming

"Madame Risler," has not changed her nature, and her "little venal soul" (sa petite ame vénale), as M. Daudet has it, remains unaltered. She passes through respectability unpurified and unelevated, scatters shame and misery around her, and at last drives her husband to suicide. Finally, having lost all she has toiled and plotted for, husband, station, wealth, good name, we leave her, still beautiful and always callous, sinking gaily into depths even below her starting point, and taking to a life of glitter and tawdry vice as to her native element. We found her in a garret, and take our leave of her on the stage of a café-concert—the right woman in the right place.

It is a story full of dramatic, and, in parts, even of tragic interest, with numerous and varied personages; and yet so flowingly told that, but for its length, one might suppose it to have been written off at a single sitting. There is none of that labored building up of incidents, that toilsome tangling and then unravelling of the story which is perceptible in most novels. The shortest tale could not be more easily told. Thanks to this work, M. Alphonse Daudet became suddenly famous. He had been before the public more than a dozen years, and was known as the author of many short tales and clever sketches, that were both graceful and life-like, but which scarcely gave promise of a novelist of the first order, such as he has proved himself to be. Had he possessed far less literary merit, the reality of his pictures would have entitled him to a foremost place; but he is something more than truthful, he is æsthetically truthful. He belongs to a realistic school, it is true, and the hackneyed comparison of the photographer came naturally under our pen; but his personages, photographed though they may be, are grouped with the skill of a true artist.

A novel which depicts truthfully any of the aspects of French social life should be highly prized, for it is a rare phenomenon. The French novelist may have, and often has, wit, fancy, and power; his dialogues may be brilliant, his incidents skilfully combined, his scenes of passion eloquent and thrilling, but, as a rule, his portraiture of manners and society is utterly valueless. The characters and the homes he paints belong to the

domain of fancy, and might well be the inventions of some foreigner who had never visited France. English readers are often scandalized, and with reason, at the strange doings attributed in French novels to English "milords" and "charming misses," but they would, perhaps, be somewhat appeased if they could be aware that the French personages of the book are only a trifle less exaggerated and improbable. We appeal to that numerous class in England whose experience is limited to the novels published in the Revue des Deux Mondes, which may be supposed to be among the best: who has not remarked that one of the stock characters among heroines is a lovely and imperious heiress, who lives alone in a château with one or two faithful domestics, and gallops about the country day and night in the wildest manner, on the most unmanageable of steeds? Even if there is an elderly relative in the background, the young and wilful Amazon is never thwarted. Now this kind of liberty is simply impossible in France. Again, there is another favorite female personage, the impassioned heroine who, regardless of social censure, indulges in the most daring and compromising freaks on the slightest provocation—certainly a most exceptional type in a country where even vice usually respects appearances, and where social and family ties are valued so highly that passion hardly ever relinquishes them voluntarily.

As to the heroes, it may be remarked that their chief characteristic is generally prodigality pushed to a fearful extent, and this, again, is decidedly not a distinguishing trait of the national character. Indeed one might say, generally speaking, that French society is depicted by its novelists, as the children's game has it, "by the rules of contrary." As a last instance, we may point to the immense amount of travel that the French novelist imposes on his heroes whenever their loves or their fortunes take an unfavorable turn. Who does not know the stereotyped phrase: "Un beau jour le Vi-comte" (or shall it be le Marquis?) "disparut de Paris, et personne ne put dire ce qu'il était devenu. La société Parisienne s'émut pendant quelques jours de cette disparition, puis elle l'oublia." When the Vicomte comes back to astonish oblivious society he has

invariably visited Japan, Cochin China, and Central Africa, to say the least. Now, do we not know that a French traveller is a rare being, and that in real life when the Vicomte or the Marquis has failed in the romance of life he generally, in the bitterness of his despair, gives a sullen consent to his own union with the eligible young lady his family have provided for him-marriage being the mitigated form of suicide usually adopted by young viveurs when reduced to desperation?

It may be said that French novelists, by choosing their chief actors among possessors of long pedigrees and large rent-rolls, have wilfully rendered accuracy impossible, as they neither belong nor are admitted to the blessed regions where these things are to be found. A Frenchman of high birth and large fortune does not write novels himself, and there are usually very good reasons why he should not associate with those who do. He is well educated, and has even been made to study hard enough, perhaps, up to the age of twenty or thereabouts-probably to pass his examination for the military school of St. Cyr; but, this point gained, with a few splendid exceptions, the intellectual effort is relaxed for life. Even the exceptions belong to politics or science, and light literature finds few or no recruits among the higher class. The scenes of aristocratic life to be found in French novels are necessarily mere fancy pictures painted by outsiders gifted with strong imaginative powers. At the other end of the social scale we have the ideal working man of socialist writers, who, if possible, is still less life-like and upon whom it is needless to dwell. Sufficient to say that he is as unreal as he is tiresome, and that is saying a great deal.

Nor is family life in the middle class more truthfully described. When a novelist condescends to represent it, the result is almost always a hideous caricature. All the unlovely and prosaic features of bourgeois life, which are evident enough, are made so prominent that they cast into shade the pleasanter lines. For the literary artist, the bourgeois is a Philistine whose function in a novel can only be to serve as a foil for the brilliant personages of that fantastic world where perfidious Russian princesses, with unbridled caprice, green eyes and boundless wealth, artists of transcendent genius, and the blue-blooded patricians, male and female, of whom we have spoken, disport themselves. Even such a man as M. Taine, writing some years ago in one of his lightest moods under the name of Thomas Graindorge,* described, we remember, a bourgeois ball in these words:—

"Dans ce monde-là les femmes ne sont pas des femmes; elles n'ont pas des mains, mais des pattes; un air grognon, vulgaire, une demitoilette, des rubans qui jurent. On ne sait pas pourquoi, mais on a les yeux choqués et comme salis. Les gestes sont anguleux, la grâce manque. On sent des machines de travail, rien de plus."

These are cruel words, and there has not been much change in the tone of the French novelist since they were written. He is not only generally a snob, he is, above all, a "liberated" bourgeois—to borrow Heine's expression—who hates with the hate of a renegade the class from which he has escaped, while he shares unconsciously many of its mean and envious admirations.

To estimate pretty accurately how far novels in any country are likely to represent faithfully its manners, one need only consider who are the people who write, and who are those that read them. In England any one casting his eye round a room filled with tolerably educated people, might boldly affirm that nine-tenths of them were, if not, properly speaking, novel-readers, at any rate readers of novels, and he would scarcely be safe in asserting, whatever might be the appearances, that no novel-writer was present. Novels in England are written by people of all kinds. Old maids, and even young maids, widows of every variety, briefless young barristers and wellto-do elderly squires, idle attachés and overworked statesmen, all may, and many do, write novels. English society, as it is to be found in works of fiction, has been viewed and painted from all sides, and although the writer is often incompetent to describe well what he or she has seen, and, moreover, not unfrequently attempts to describe what he or she has not seen, still, on the whole, any foreigner going through a well-ordered course of

English novel-reading would have a very fair idea of English society. The real drawback to this universal vocation, where, after all—here as elsewhere—few are really chosen is the production of an immense amount of writing which is not literary. But this remark does not apply only to novelists, and has nothing to do with our present subject.

In France the case is altogether different. There are whole classes of the community which furnish no readers to the novelist. No well-educated girl, whether noble or bourgeoise, is ever allowed to read novels; no man who aspires to the title of "homme sérieux" ever admits that he allows himself to read them. M. Guizot, it is true,-and if ever a man was "serious" he was-used to confess that, to rest his mind, he often indulged in a novel, but then he took care to add that the novels he read were English. It is much to be regretted that French girls do not read the few novels which might safely be put into their hands, for the unfailing operation of the law of supply and demand would in that case stimulate the production of works of a purer and healthier tone to suit this new class of customers. Even as it is, French writers should be encouraged to greater discretion by the immense sale of certain works-like Mrs. Craven's Récit d'une Saur, for example-which must evidently be attributed in great measure to the difficulty of finding books which can interest without corrupting the young. The chief consumers of novels are, in fact, shop-girls and ladies' maids, who devour them; then, alas! young married women, whose first use of their newlyacquired liberty is to seize on the forbidden fruit of their girlhood, novels and the minor theatres; idle men who smoke over the small daily dose of fiction in the newspapers without paying much attention to what they read; and, lastly, the large class of provincial human mollusks whose only literary food is the feuilleton of their journal. These latter often cut off the feuilletons day by day and pin them together, and when the story is completed exchange them with their neighbors for another equally defaced and crumpled collection of strips detached from some other newspaper; for the bourgeois is thrifty and does not buy books. Few people, indeed, buy novels

^{*} Notes sur Paris. Vie et Opinions de M. Frédéric-Thomas Graindorge, Paris, 1867.

in France, except a cheap volume now on, in ordinary cases, are the circulating in its turn regards him with suspicion. libraries. The volumes which come from these pass from the grisette to the great lady, but are never allowed to lie on the table of a well-ordered drawingroom. She who reads them hides them in her bedroom, or secretes them under the sofa cushion if a visitor is announced. There is a guilty joy in the indulgence, and the volume, moreover, is generally soiled and unseemly in more than a figurative sense.

A public such as we have described is not likely to be fastidious, or to keep its suppliers of fiction in order. Plays constantly form the subject of conversation in a Parisian salon, and are minutely criticised, but novels are rarely discussed. The personages of French fiction never seem to enter into the circle of real acquaintance, and their sayings do not become household words. How should they? They are almost always the product of the author's invention, not of his observation-mere book-monsters who can claim kindred with none of us.

Nor is the difference less great between novelists on either side of the Channel than between their readers. We have said that in France novelists almost invariably belong to the bourgeoisie, and very often to the lowest ranks of it, whereas in England they are to be found in all classes of society; but this is not all, nor the worst. In England, when a writer makes his first attempt in fiction, he commonly has either independent means, or some other bread-winning occupation; he feels his way, and only gives himself up to the regular production of novels when he is pretty well assured of a certain amount of success. Or, maybe, he divides his time between literature and some humdrum remunerative calling which keeps him in communication with the everyday working world he has to paint. The young French writer, on the contrary, takes a leap in the dark into the arms of the Museswho may, or may not, let him fall to the ground—and generally forswears all other means of livelihood but his pen. He is an author by profession, enrolled in a literary corps, puts on bravely his "paper

uniform turned up with ink," and thenceand then for a railway journey, and the forward keeps aloof with contempt from only customers publishers can reckon the uncongenial unlettered crowd, which

His education has probably been compassed at the price of great sacrifices on the part of his family. After going through the classes of a provincial lycée, he has been sent to Paris on a small allowance to prosecute his studies at the schools of law or medicine. Paris life. and liberty especially, are attractive at twenty, even under difficulties; and the pleasures of youth are not necessarily expensive. He goes to the play cheaply, and often gratuitously; haunts cafes with his friends, where they talk a great deal and spend very little; and their conversation is of politics, literature, art, and pleasure. To speak of his intellectual enjoyments only, he leads a life which, with all its poor surroundings and even privations, is removed far above the narrow penurious home of which his holidays have left him the remembrance. He has very little money, it is true, but that little he may squander as he likes; and he has his small prodigalities. No wonder he dreads the return to his expectant family, for he knows exactly what awaits him at home—là-bas, as he calls it. Là-bas, during all these years, while he has been acquiring other tastes and habits, his future has been carefully mapped out for him, for French parents do not willingly leave to chance the happiness of their children. He knows beforehand not only where he is to live, and what he is to do, but also the woman he is expected to marry. It may be the daughter of the notary, to whose office he hopes to succeed; or the unmeaning cousin with the small contiguous property. In any case he is not expected to have either initiative or hesitation. He can foresee what his life is to be till he becomes-horrid thought !--just what his father, his bonhomme de père, is! It may be happiness that is in store for o him, but it is not the sort of happiness that allures a heart full of hopeful fancies, and a mind stirred, perhaps, with the consciousness of talent. So after many delays he informs his family that he has no vocation for a provincial life, and that he wishes to seek employment in Paris. This soon calls forth a threat

to cut off the supplies, followed by a quick retort from the rebel that he will-

support himself by his pen.

Then begins the literary life. The material difficulties may be easily imagined; and our business is only with the future novelist, and his chances of learning his business. These are very small. France does not possess innumerable magazines and reviews of all degrees, with their short and varied articles; and the French beginner cannot, like his English brother, try his hand on unpretending and anonymous "padding." The habit of signing contributions closes the columns of papers of the higher class against unknown contributors, however talented; so our débutant enrolls himself on the staff of some obscure journal, and, if his line is fiction, undertakes to furnish a romance for the feuilleton. The pay is small, therefore the necessities of life require that it should be frequent, and the writer, however conscientious he might wish to be, cannot spend much care or time on his work. Moreover, the feuilleton is doled out to the public in small daily fragments, and the reader's interest must be kept alive by a succession of startling incidents. These two conditions under which he labors would be quite sufficient to spoil any young writer's hand; but there is more besides. In the great city he has neither family nor connections; no respectable and cheerful homes are open to him; no cultivated and refined female society is accessible to him; and if it were, he could not afford to frequent it. Of the women he does see we had better say nothing; his male associates are almost exclusively his fellow-workers in the field of literature or art. Their chief relaxation is to "exchange ideas;" in other words, to talk over their own or their friends' work-past, present, or future. This constant intercourse with competitors in the race for public favor engenders an insane desire for novelty and originality at any price, than which nothing can be more dangerous for a novelist. When a writer is bent on depicting what no one else has ever painted, he runs a great risk of depicting what no one has ever seen.

Such are the early influences which shut out the French novelist from the knowledge of home life and the normal

aspects of the society which surrounds him. The "interloping" world-to borrow a French phrase—in which he seeks his recreation, he can portray truthfully enough. Later on, when fame, and maybe money too, have been attained, nothing would prevent his becoming a bon bourgeois himself, and perhaps he would like it; but by that time life has got into its grooves, and his literary habits-to speak only of those-are formed. Success, however, is the exception. Light literature, which begins in Bohemia, too often ends there. M. Alphonse Daudet, in a novel entitled Jack, which followed Fromont Jeune et Risler Ainé, has described with painful accuracy a group of literary failures—les Ratés, as he calls them. Those that miss fire or flash in the pan-to translate literally the pithy French word-are a numerous and not always a harmless class in France, as her revolutions have abundantly shown. The admirably-sketched character of the actor Delobelle in the novel now before us is an excellent specimen of M. Daudet's talent for painting "failures."

But, it may be said, how are we to reconcile this sort of antagonism between society and the literary class in France, with the fact that some of her most eminent statesmen and politicians have been literary men, and more especially journalists in their day? The answer is simple. They may have been political journalists, but they were not novelists, dramatists, or poets. Revolution, of course, takes men where it pleases, and may bring a Rochefort to the front; but, as a rule, the men of letters who in France have risen from obscurity to the foremost ranks, are men who began life by devoting themselves either to public instruction, or to private tutorship, and by these occupations kept themselves in contact with the varied every-day world, from which the high priests of pure literature affect to keep aloof. The professor easily slides into the journalist, or a tutor in an influential family is often converted into a private secretary, and so an entrance into political life is effected. Patronage lies at the root of more successes than is supposed in democratic France. The recently published correspondence of M. Doudan,* for example,

^{*} X. Doudan, Mélanges et Lettres, Paris, 1876.

shows the standing and social influence which purely literary merit of a certain order could obtain for a man whose origin was so obscure that it seems not to have been known even to the illustrious personages who listened to him with such deference. M. Doudan played no political part, because his bad health and still more his essentially dilettante turn of mind, made him dread the drudgery of office, but it is evident that his own will was the only obstacle to his preferment. But then, M. Doudan belonged to the circle of the Duc de Broglie, in whose

family he was at first a tutor.

French novelists, we have shown, are both unable and unwilling to paint society truthfully; as regards bourgeois life, it should in fairness be added that its features are, in general, neither attractive nor romantic. Before going further, we must remind the reader that bourgeois and bourgeoisie are comprehensive terms which serve to designate persons of very different social standing. Strictly speaking, the bourgeoisie includes every one who is neither noble, priest, nor peasant, and who does not work for wage or hire. M. Guizot was a bourgeois, and so is M. Thiers, and so likewise is the small tradseman who keeps his own shop. But just as we recognise an upper and a lower middle class in England, so the French, in less awkward phraseology, distinguish between a haute, and a petite bourgeoisie. The haute bourgeoisie has as much culture and wealth as the aristocracy, and differs from it chiefly in having more self-assertion and less religion. There was a time, no doubt, when the title of burgess was a coveted appellation, but in the present day those only are proud of it who can just attain it on tiptoe. The petit bourgeois even, prefers to style himself rentier or propriétaire, as the case may be. Used as an adjective, the word bourgeois is not taken in good part; air bourgeois is synonymous with vulgarity, just as luxe bourgeois means show without taste. There are, however, two characteristic exceptions to this rule: vin bourgeois means unadulterated wine, and an ordinaire bourgeois conveys the idea of simple but excellent fare. Words in this case are the true representatives of things.

Even the smallest of bourgeois eats and drinks well, but these are poor mate-NEW SERIES .- VOL. XXV., No. 5

rials for romance. In all countries, people who from their youth upwards have had to think a great deal about getting money and have enjoyed little leisure, are, as a rule, neither romantic, nor poetical, but with the French petit bourgeois there is this aggravating peculiarity: that while he spends all the first part of his life in getting money, he generally devotes all the latter part to saving it up for his children, and that having had no leisure in his youth, he gives himself up after-wards to unmitigated idleness. He has "retired;" he is henceforward a rentier, one of those petty fund-holders of whose numbers France is so proud. No man possesses to the same degree the art of doing nothing, without being absolutely asleep. He invents no self-imposed tasks, none of those pleasurable toils or toilsome pleasures, which with an Englishman give value to leisure. He does not require them, and takes his leisure undiluted. The worked worsted slippers which, in the country, he loves to wear during the whole forenoon, speak vol-umes. The torturing shoe of the Chinese umes. lady is not a surer impediment to activity than those easy slippers of his. What can a man do who has embroidered slippers on, but stand on his door-step and talk to his neighbors next door, or to the passers-by on the muddy road where he

This uninteresting being is not without his good qualities. He is no snob. He toadies no man, asks nothing of any body, is honest in his dealings, has a holy horror of debt, honors his father and his mother—especially his mother, like all Frenchmen—and what is more, maintains them ungrudgingly, if neces-sary, out of his hardly-earned little income. He admits the equal claims of his wife's parents to his deference and support, and, in a word, shirks no family duty. Inclined as he is to self-indulg-ence, he, nevertheless, perseveringly curtails his own enjoyments in order to leave his children as well, or better off, than himself. He is easy-tempered too, though you would hardly think so if you heard him holding forth after dinner against nobles and priests. It is only talk, for in his heart he is far more afraid of the Reds, when, by his silly votes, he has made their advent to power appear probable. He has not the same excuse

cannot venture?

as the peasant, and does not in reality believe that any political revolution would restore to the nobility or the priesthood their lost privileges; nor is he moved by the feeling of envy which actuates the haute bourgeoisie, for he is too far removed from the aristocrats he denounces to think either of outshining them, or of purchasing their alliance with the dot of his daughter. He is merely following unconsciously the revolutionary tradition. Nobles and priests were confounded in one common execration, and he goes on hating where his fathers hated before him, because—paradoxical as it may appear-he is, unknown to himself, intensely conservative, and has not sufficient originality to have an opinion of his own. Generally speaking, it is as natural to him to be irreligious as for the grande dame to be the reverse. It is his birthright, and nobody expects any thing else of him. Even the curé, if he is a bon diable, as our bourgeois— irreverent even in his praise—loves to call him, will merely shake his head in good-humored hopelessness when some profane joke is uttered, as much as to say: "It is very sad, but of course a petit bourgeois must be a Voltairian and a free thinker." Even his wife, if she happens to be more devout,-which is not very likely,-will take the thing quietly, being accustomed in her class to see unbelief considered as an attribute of the other sex. "What would you have? Men will be men," she says.

Most Frenchwomen have a strong sense of duty, for which they scarcely get, we think, due credit among other nations, their lighter qualities being generally supposed to be incompatible with it. To no woman is it more necessary, for, in spite of great independence and even social power, their lot is generally a trying one. Marriage is the turning point of woman's life, and in France, except in the strictly prolétaire class, all marriages are more or less arranged. That these turn out as well as they do is mainly owing, we venture to assert, to the wife's willing and cheerful accept-ance of her duty. Englishmen are apt to exalt the domestic virtues of their countrywomen at the expense of all other nations, and we sometimes wonder whether Englishwomen, while receiving their due meed of praise, ever take into

account the far greater difficulties under which other women-their French sisters, for example-practise those same virtues. Do they realize the fact that in the life of nearly every well-conducted Frenchwoman there has been no romance, no novel-acting, no love-making at all, at any time? Mr. John Smith is not, perhaps, a romantic being, and after a while his wife has probably found it out, but, rightly or wrongly, he was a hero of romance once for her, and Mrs. Smith has had her own novel, the remembrance of which makes it more easy for her to forgive poor John his shortcomings.

What is a woman's life without romance? So strong is the natural craving for it that many a young French bride tries to persuade herself, against all evidence, that she has been the choice of her husband and, if he is a consenting party, begins her novel at what an English girl would consider the end of the last volume. This is sometimes successful, and love springs out of marriage more frequently than people, judging from an English point of view, would think possible. In many cases, however, the void has to be filled up by maternal love exalted into a passion. It takes possession of the empty heart and reigns supreme—the one absorbing passion of a whole life. Among the upper classes religion holds a great place in women's lives, and the constant intervention and observances of the Catholic Church afford not only encouragement and support, but, what is scarcely less necessary, occupation. But the petite bourgeoise does not turn to the Church for comfort, and the lower we descend in the social scale-in large towns especiallythe greater we find religious indifference. M. Daudet has exemplified this when he makes little Désirée Delobelle commit suicide as soon as she finds out that work is no longer for her a refuge against despair. She does not give a thought to any other world than the one in which there is no hope left for her. She looks neither above it nor beyond it, to fear punishment or to seek for help.

[&]quot;Qu'est-ce qui aurait pu donc la soutenir au milieu de ce grand désastre? Diou? Ce qu'on appelle le Ciel? Elle n'y songea même pas. À Paris, surtout dans les quartiers ouvriers, les maisons sont trop hautes, les rues

trop étroites, l'air trop troublé pour qu'on aperçoive le ciel. Il se perd dans la fumée des fabriques et le brouillard qui monte des toits humides; et puis la vie est tellement dure pour la plupart de ces gens-là, que si l'idée d'une Providence se mêlait à leurs misères, ce serait pour lui montrer le poing et la maudire. Voilà pourquoi il y a tant de sui-cides à Paris. Ce peuple qui ne sait pas prier est prêt à mourir à toute heure.'

Poor little Désirée had tasted-ever so little-of the honey of romance, and she had to die. Fortunately few of her countrywomen take matters so tragically. In general, the girl of the petite bourgeoise marries the most prosperous of her suitors and makes the best of him, whether she can manage to love him or not. She is the partner, if not of her husband's soul, at any rate of his business, and no inactive partner either. We have sometimes, indeed, been tempted to think that the thrift which distinguishes Frenchwomen of this class is an instinct implanted in their hearts by a beneficent and pitying Providence to furnish some poor nutriment for the imaginative faculty which otherwise would perish by atrophy. Everything which gives the future predominance over the present offers in its way food for imagination, and though gaining and saving may not be romantic in themselves, they contain some of the true elements of romancetrust in the unknown and forgetfulness of the real in the contemplation of the unreal. The visions that "rise from a cheeseparing" are not lofty, but they are visions nevertheless, and, in so much, partake of the nature of poetry. A dull sort of poetry if you will. Still these visions give strength to the young and pretty mother to relinquish finery and pleasure and submit to daily labor and privations to put by the dot of her little daughter, in order that she may in her turn marry and save. Economy and frugality are not elevating influences, but, on the whole, it is perhaps more ennobling to save for others than to spend recklessly on one's self. So it may be that thrift has other uses than that of repairing the losses caused by the Franco-German war. As soon as we saw that M. Daudet had made Sidonie unthrifty and childless we knew that he had doomed her to perdition.

particularly bright little bourgeoise, whose

life we followed from afar during many years. When we first knew her, more than twenty years ago, she was a young and blooming bride, who took possession of the seat reserved for her at the till in her husband's shop as proudly as if it had been a throne. It was a large grocery shop in the Rue St. Denis, and the business was flourishing. Madame Mthrone was fenced off from the shop on three sides by a brass-wire netting, leaving only an opening in front which served as a frame for her bright and ever-pleasant countenance. There she sat day after day, with the heavy leatherbound books and ledgers before her, always busy and never hurried; with a gracious smile for every customer, and a vigilant eye for all the shopmen. In the summer, when the Rue St. Denis was hot and stifling; in the winter, when the ever-opening door sent in cold draughts of wind, there she sat. One would like to think that in the evening there was some relaxation; but as every account that was sent in by that house, was in her handwriting, we fear there was often evening-work as well. After a time, a little girl took her seat beside her within the sanctuary of brass-wire netting, and played with her doll, or did some little bit of childish needlework under the mother's eye. The doll soon made room for slates and copybooks; but still the child was there, and kept her mother company. In time, she took her place now and then at the heavy books by way of initiation into the mysteries, while her mother worked by her side. Years went by, and Madame M-- was still there; her eye was as vigilant, perhaps more vigilant than ever, but it was less bright; her smile was as gracious and as unfailing, but it was less varied and more conventional; in a word, her youth was gone, utterly passed away behind that commercial cage of brass-wire. other day, looking into the shop, we noticed that there was a new master. the mistress was not new; the child, the girl, the woman whose whole life had been spent there, now reigned in her mother's stead. The shop, her dot, herself, had been handed over together to the same purchaser. "Her father and mother had retired," she said. "They As we write we are reminded of one live in the country now," she added, not without a touch of pride.

If any one wishes to know what becomes of the retired Parisian tradesman, he should "view"-as the house-agents say-the small country houses with one or two acres of land which are for sale, at prices varying from 800l. to 1200l., in the vicinity of Paris. They are constantly changing hands, as each successive owner finds out that he is not fitted for country life. It has been the dream of his-and especially his wife's-life to have a country house some day. When they used to go into the country for their Sunday holiday, the little houses with their green window blinds seemed so cool and pleasant when compared to the hot, dusty road over which they trudged. There can be no greater difference of position than that which exists between one man who stands on the high road, on a broiling summer's day, and looks at a house with pretty flowers and green trees, and another who looks at the hot high road out of the windows of that same house. And then to think that while they were toiling wearily back to the railway station and baked-up Paris, the happy owners of that house were dining with their windows open, and sipping their coffee on those green benches outside the door! No wonder they register a vow to have such another paradise of their own some day! and, unfortunately for them, they keep their vow.

The house, viewed dispassionately, is hideous—a square box with white plastered walls, and a complete absence of that creeping leafy ornament which Englishmen associate with the idea of a cottage. If there is a view, the house may, or may not, turn its back to it; the bourgeois does not much care. The garden is inclosed within four high walls, for there must be plenty of fruit-bearing espaliers. These, in their season, have their charms; but they require sun and air, so no large, unprofitable trees are suffered in their neighborhood. The whole establishment betrays the utilitarian tendencies of the owners. There is a pigeon-house, a fowl-house, rabbit-hutches innumerable, and standard fruit trees in every available corner, but few flowcheaply, and especially to make a great ter,-Macmillan's Magazine. many confitures. There is no greater

bliss for the petite bourgeoise during the honeymoon of proprietorship than to make her own confitures from her own fruit, out of her own garden. But no bliss is lasting, and ennui soon creeps into the ugly little paradise. Monsieur begins to be bored and runs up to Paris "on business;" then Madame is still more bored, and vows that she is afraid when she is left alone. She is too economical to spend her money in going up to town, and too prudent, moreover, to leave her little bonne unwatched during a whole day. So, at last, she speaks out boldly, and the dream of her life is got rid of to her infinite satisfaction. They return to Paris; Monsieur to his boulevards, his café, and his games of piquet or dominoes: Madame to her marketing, her gossip, and her envying friends with whom she dilates on the charms of the country house her husband would sell.

In a still humbler line, M. Daudet has given an excellent picture of the life of M. and Madame Chèbe at Montrouge, and there is not much exaggeration when he describes Madame Chèbe following with her eye the omnibus as it starts for Paris, and compares her to an employé of Cayenne or New Caledonia watching the departure of the packet for France.

With one remark we must conclude. M. Daudet's book may be taken as a picture of bourgeois manners, but not of bourgeois morals. The particular form which vice assumes in George Fromont and Sidonie, and the immorality of old Gardinois, are evidently the results of their social station, and M. Daudet, not uninfluenced perhaps by the prejudices of the literary caste, has dwelt with complacency on the ugliness of bourgeois vice; but it would be very unfair to take such people as samples of their class. It is in the details of life, in the mise en scène, so to speak, of the story, and in his minor personages, that he is an inimitable portrayer of bourgeois life. opening marriage scene, the death and funeral of Désirée, are wonderfully accurate pictures. Above all, the long fruitless waiting of Frantz Risler at the railway terminus is a scene which could only The idea evidently is to live have been painted by the hand of a mas-

ALICE.

THE winds gently sighing one star-lighted night, Waft the fishing-boats out from the bay; And golden-haired Alice, with eyes gleaming bright, Waits and watches them sailing away: And she murtures these words as they fade from her sight, 'O bounteous, beautiful sea, Send the spoil to their nets, A fair breeze to their sails, And my true love, to-morrow, to me.'

The morning broke darkly—the shingle was white With the feathery far-driven foam; And Alice, with lips white as snow with affright, Passes, speeding away from her home:
And they hear her sad voice in the grey morning light, 'O powerful, ravenous sea, Keep the spoil in thy depths, Hold the breeze on thy breast, But return my true lover to me.'

She lost him for ever. And when the cold sheen Of the star-shine illumines the waves, The form of fair Alice may often be seen, On the sands, near the tempest-arched caves: And she sings her weird song in the morning air keen, 'O merciless, death-dealing sea, That steals from us our best, Take me into his rest, Or restore my lost treasure to me.'

Belgravia Magazine.

MESMERISM, ODYLISM, TABLE-TURNING AND SPIRITUALISM, CONSIDERED HISTORICALLY AND SCIENTIFICALLY.

Two Lectures Delivered at the London Institution, December, 1876.

BY WILLIAM B. CARPENTER, C.B., M.D., LL.D., F.R.S.

LECTURE II.

SEVERAL years ago, an eminent Colonial Judge with whom I was discussing the subject on which I am now to address you, said to me, 'According to the ordinary rules of evidence by which I am accustomed to be guided in the administration of justice, I can not refuse credit to persons whose honesty and competence seem beyond doubt, in regard to facts which they declare themthe character of a great body of testi- to statements reported by witnesses mony I have received in regard to the whose good faith could not be called in

phenomena of Spiritualism.' In arguing this matter with my friend at the time, I took my stand upon the fact, well known not only to lawyers but to all men of large experience in affairs, that thoroughly honest and competent witnesses continually differ extremely in their accounts of the very same transaction, according to their mental prepossessions in regard to it; and I gave him instances that had occurred within my own experience, in which a prepossession in favor of 'occult' selves to have witnessed; and such is agencies had given origin and currency question, which careful enquiry afterwards proved to have no real foundation

Subsequent study, however, of the whole subject of the validity of Testimony, has led me not only to attach yet greater importance to what metaphysicians call its subjective element—that is, the state of mind of the witness who gives it; but, further, to see that we must utterly fail to appreciate the true value of evidence, if we do not take the general experience of intelligent men, embodied in what we term 'educated common sense,' as the basis of our estimate. In all ordinary legal procedures, the witnesses on each side depose to things which might have happened; and in case of a 'conflict of testimony,' the penetration of the presiding judge, and the good sense of the jury, are exerted in trying to find out what really did happen; their search being guided partly by the relative confidence they place in the several witnesses, but partly by the gen-

eral probabilities of the case.

Now, it would be at once accepted as a guiding principle by any administrator of justice, that the more extraordinary any assertion-that is, the more widely it departs from ordinary experience—the stronger is the testimony needed to give it a claim on our acceptance as truth; so that while ordinary evidence may very properly be admitted as adequate proof of any ordinary occurrence, an extraordinary weight of evidence would be rightly required to establish the credibility of any statement that is in itself inherently improbable, the strength of the proof required being proportional to the improbability. And if a statement made by any witness in a Court of Justice should be completely in opposition to the universal experience of mankind, as embodied in those laws of nature which are accepted by all men of ordinary intelligence, the judge and jury would most assuredly put that particular statement 'out of court' as a thing that could not have happened-whatever value they might assign to the testimony of the same witness as to ordinary matters. Thus if, in order to account for the signature of a will in London at a certain time, by a person who could be proved, beyond reasonable doubt, to have been in Edinburgh only an hour before, either a single witness,

or any number of witnesses, were to affirm that the testator had been carried by 'the spirits' through the air all the way from Edinburgh to London in that hour, I ask whether the 'common sense' of the whole Court would not revolt at such an assertion, as a thing not in rerum naturd? And yet there are at the present time numbers of educated men and women, who have so completely surrendered their 'common sense' to a dominant prepossession, as to maintain that any such monstrous fiction ought to be believed, even upon the evidence of a single witness, if that witness be one upon whose testimony we should rely in

the ordinary affairs of life! There is, indeed, no other test than that of 'common sense,' for distinguishing between the delusions of a Monomaniac and the conclusions drawn by sane minds from the same data. There are many persons who are perfectly rational upon every subject but one: and who, if put on their trial, will stand a searching cross-examination without betraying themselves, especially if they know from previous experience what it is that they should endeavor to conceal. But a questioner who has received the right cue, and skilfully follows it up, will generally succeed at last in extracting an answer which enables him to turn to the jury and say-' You see that whilst sane enough in other matters, the patient upon this point is clearly mad.' Yet the proof of such madness consists in nothing else than the absurd discordance between the fixed conviction entertained by the individual, and what is accepted by the world at large as indubitably true; as for example, when he declares himself to be one of the persons of the Trinity, or affirms (as in a case now before me) that he is a victim to the machinations of Infernal powers, whom he overhears to be conspiring against him. We have no other basis than the dictates of 'common sense' for regarding such persons as the subjects of pitiable delusions, and have no other justification for treating them accordingly. Their convictions are perfectly true to themselves; they maintain in all sincerity that it is only they who are sane, and that the rest of mankind must be mad not to see the matter in the same light; and all this arises from their having allowed their

some 'dominant idea,' which at last takes full possession of them. Thus, for example, a man suffering under incipient melancholia begins by taking gloomy views of everything that concerns him; his affairs are all going to ruin; his family and friends are alienated from him; the world in general is going to the bad. Under the influence of this morbid coloring, he takes more and more distorted life, and looks back with exaggerated reprobation at the errors of his past; and in time, not only ideal misrepresentations of real occurrences, but ideal constructions having scarcely any or perhaps no basis in actual fact, take full possession of his mind, which credits only his own imaginings, and refuses to accept the corrections given by the assurances of those who surround him. So I have seen a woman who has had the misfortune to fix her affections upon a man who did not return them, first misinterpret ordinary civilities as expressions of devoted attachment, and then, by constantly dwelling upon her own feelings, mentally construct ideal representations of occurrences which she comes to believe-in as real; not allowing herself to be undeceived, even when the object of her attachment declares that the sayings and doings attributed to him are altogether imaginary.

It is in this way that I account for what appear to me to be the strange delusions, which have laid hold at the present time of a number of persons who are not only perfectly sane and rational upon all other subjects, but may be emi-nently distinguished by intellectual abil-They first surrender themselves, without due enquiry, to a disposition to believe in 'occult' agencies; and having so surrendered themselves, they interpret everything in accordance with that belief. The best protection against such surrender appears to me to be the early culture of those scientific habits of thought, which shape, when once established, the whole future intellectual

course of the individual. The case is not really altered by the participation of large numbers of persons in the same delusion; in fact, the majority sometimes goes mad, the few who retain their 'common sense' being

minds to fall under subjection to the exceptions. Of this we have a notable instance in the Witch persecutions of the 17th century, mainly instigated by King James I. and his Theological allies; who, because 'witchcraft' and other 'curious arts' are condemned both by the Mosaic law and by Apostolic authority, 'stirred up the people' against those who were supposed to practise them, and branded every doubter as an atheist. The 'History of Human Error' views of the occurrences of his present. seems to me, in fact, to have no pages more full of instruction to such as can read them aright, than those which chronicle the trials for witchcraft in the seventeenth century; presided over by judges-like Sir Matthew Hale-of the highest repute for learning, uprightness, and humanity. Not only were the most trivial and ridiculous circumstances admitted as proofs of the charge, but the most monstrous assertions were accepted without the slightest question. Thus in 1663 a woman was hanged at Taunton, on the evidence of a hunter that a hare which had taken refuge from his pursuit in a bush was found on the opposite side in the likeness of a witch, who, having assumed the form of the animal, took advantage of her hiding-place to resume her proper shape. And the proof of these marvels did not rest on the testimony of single witnesses. In 1658 a woman was hung at Chard Assizes for having bewitched a boy of twelve years old, who was seen to rise in the air, and pass some thirty yards over a garden wall; while at another time he was found in a room with his hands flat against a beam at the top, and his body two or three feet above the floor-nine people at a time seeing him in this position.

> The Witch-persecution carried on by James VI. in Scotland, before his accession to the English throne, is believed to have caused the sacrifice of several thousand lives; but in England, under the too celebrated Witch Act, which was passed by Parliament under his influence, in the first year of his reign, it was far more terribly destructive. No fewer than seventy thousand persons are believed to have been executed for witchcraft between the years 1603 and 1680; a number far larger than that of the sufferers in all the religious persecutions of the later Tudors.

In 1677, however, an able work was

published under the title of The Displaying of Supposed Witchcraft, in which the author, Webster, who had seen a great deal of the witch-trials, maintained the opinion that the whole system of witchcraft was founded on natural phenomena, credulity, torture, imposture, or delusion; and a reaction seems then to have begun in favor of 'common sense,' which was fostered by the Revolution of 1688. Though accusations continued to be made, the judicious conduct of Lord Chief Justice Holt, who presided over trials for this offence in various parts of the kingdom, generally caused the acquittal of the prisoners; and when they were found guilty and condemned, the capital sentence was not carried out. The last witch-execution in Scotland, where the Theological prepossession longest maintained its hold over the public, was in 1722; and the Witch Act was repealed in 1736. The belief in witchcraft still survived, however, not only among the ignorant vulgar, but among some of the most enlightened men of the last century. We find Addison, in the earlier part of it, speaking of witchcraft as a thing that could not reasonably be called in question; while, towards its close, Dr. Johnson maintained that as the non-existence of witches could not be proved, there was no sufficient ground for denying their diabolical powers. This is one of the cases, however, in which an enlightened 'common sense'-the intelligent embodiment of the general experience of mankind-is a much safer guide than logic. The belief in Witchcraft was not killed by discussion, but perished by neglect. The 'childish things' believed in by our ancestors have been 'put away' by the full-grown sense of the present generation; the testimony in their favor, once unquestionably accepted as convincing, is no longer deemed worthy of being even considered; and it is only among those of our hereditarily uneducated population, whose general intelligence is about upon a par with that of a Hottentot or an Esquimaux, that 'cunning women' are able to turn this lingering superstition to the purposes of gain.

Of the rapid spread of the Witchcraft delusion in a population whose theological 'prepossession' favored its develop-

when 'common sense' resumed its due ascendancy, no case was more remarkable than the Epidemic that spread through Puritan New England, near the end of the seventeenth century. This was initiated by the trial and execution of a poor Irishman, who, being obnoxious as a papist, was accused of having bewitched two children who suffered from convulsive attacks. Dr. Cotton Mather, Fellow of Harvard College, received one of these children into his house: and it was chiefly on his testimony as to the fact of the girl's possession by evil spirits, that the unfortunate Irishman was convicted and executed. The judicial persecution, once begun, soon raged with such severity, that its victims were hung by half a dozen or more at a time; one of them being a minister, who had provoked his judges by calling in question the very existence of witchcraft. The accusations became more and more numerous, and at last implicated people of the highest consideration, among them the wife of a minister who had been one of the most active promoters of these proceedings; so that the authorities felt it necessary for their own safety at once to check the further progress of the infection. Judges and uries then found out that they had been sadly deluded and mistaken,' only Dr. Cotton Mather's father, the President of Harvard, and other theologians still holding their ground; and the release, by the Governor, of a hundred and fifty witches who were under arrest, and the stoppage of proceedings against two hundred more who were about to be arrested came to be accepted in a short time with general approval, though vehemently protested against by Cotton Mather in these remarkable terms :-

Fleshy people may burlesque these things; but when hundreds of the most solemn people, in a country where they have as much mother-wit, certainly, as the rest of mankind, know them to be true, nothing but the froward spirit of Sadduceeism can question them. I have not yet mentioned so much as one thing that will not be justified, if it be required, by the oaths of more considerate persons than any that can ridicule these odd phenomena.

Now this is precisely the position taken by the modern Spiritualists; who revive under new forms the doctrines which were supposed to have faded away ment, and of its equally rapid decline under the light of Modern Science.

The 'hundreds of the most solemn people, who are ready to justify their conviction of such wonders as Mr. Home's and Mrs. Guppy-Volckman's aerial flights, the elongation of the body of the former, or the bringing in of ice, flowers, and fruits by the ministering spirits of the latter, are equally bound to accept the testimony given on oath and in solemn form of law, which satisfied able judges and honest juries two centuries ago, that tens of thousands of innocent people had entered into the guilty league with Satan. whose punishment was death here and everlasting damnation hereafter. The unbelieving Sadducees of the present time, on the other hand, can appeal to the same sad history, in justification of their refusal to admit the testimony of the votaries of a system which is to their minds quite as absurd and irrational as that of witchcraft, and of their disbelief in the reality of alleged occurrences which they deem it an insult to their common sense to be asked to credit. For the faithful few, who two centuries ago rallied round the standard of Rationalism, in antagonism not only to the dead weight of ignorant prejudice, but to the active force of learning and authority, had no other defence of their position than the inherent incredibility of the opposing testimony; notwithstanding that this was clearly given (in many cases, if not in all) in perfect good faith, and often admitted as true even by the unfortunate victims it incriminated, who seem to have themselves participated in what every person of ordinary intelligence now admits to have been a pitiable delusion.

But, it may be objected, the acceptance of this test would equally justify a disbelief in any of those marvels which are rightly esteemed the glories of Modern Science. Tell a man, for instance, to whom the fact is new, that the hand may be held without injury in the stream of liquid iron issuing from the smelting furnace, or dipped and moved about in a bucket of the molten metal; and he will probably reject your assertion as altogether incredible. Yet this statement, while apparently antagonistic to universal experience, can be shown to be really conformable to it. For the protection of the hand from being burned by the hot metal, when the intervention of a film of vapor has been secured by moistening its surface, is just what you may see every day in the rolling-off of drops of fluid from a heated iron, in the application of the familiar test by which the ironer judges of the suitability of its

temperature.

Take, again, the case of the Electric Telegraph, and especially that of the Atlantic cable. If submarine telegraphy had not been led up to by progressive steps, the mass of mankind would have undoubtedly scoffed at the idea of 'putting a girdle round the earth in twenty minutes;' and even after the first Atlantic cable had actually conveyed messages of great importance, to the full satisfaction of those who sent them, there were obstinate sceptics who maintained that its asserted success must be a falsehood, as opposed to 'common sense.' every person sufficiently educated to understand the scientific principle of its construction, was perfectly prepared to accept it as a real success; the speedy failure of the first cable, so far from justifying the original scepticism, only serving to show what the conditions were, by due observance of which permanent success might be assured.

Compare this with another curious demand upon public credence—the 'panasilinic telegraph '-which was made by an ingenious hoaxer about the time that the success of land electric telegraphy first set the world to dream of uniting the New World with the Old by the like means. It was gravely announced that a French savan had discovered, that if two snails were brought for a time into mutual relation, such a sympathy would be established between them, that, however widely they might be separated, the movements of each would correspond with those of the other; so that if a couple of friends, one in New York and the other in Paris, wished to converse, they had only to provide themselves with an alphabet and figure dial, get a pair of sympathetic snails, and appoint a time for their conversation. The one who led off was to make his snail walk over the dial, and stop him at the letter or figure he wished to indicate; his friend's snail would do exactly the same, and thus the message would be gradually spelled out. Now I perfectly well remember that this ridiculous absurdity

found many believers. My old friend Dr. Robert Chambers, ever on the watch for scientific novelties, gave currency to the statement in Chambers's Journal, without, however, committing himself to its truth. And I am sure that its very marvellousness had an attraction for those credulous subjects who are ready to surrender their common sense to any pretender to occult powers-the more readily, it often seems, in proportion to the extravagance of his claims.

I might cite the Spectroscope and the Radiometer as additional cases, not merely of the readiness, but of the eagerness, of scientific men, to extend their knowledge of the agencies of Nature in entirely new directions; and to accept with implicit confidence, upon adequate evidence, revelations in regard to matters lying so completely beyond the domain covered by previous experience, as entirely to transcend if not directly to violate it. Now this, in the first case, is because the whole of that wonderful fabric of Spectrum-analysis, by which we are now enabled to study the chemical and physical constitution of every kind of celestial object which the telescope can render visible to us, has been built up, course by course, on the basis of one of our most familiar scientific experiences -the dark lines that cross the solar spectrum. So, Mr. Crookes's invention of the Radiometer was the culmination of a long series of experimental enquiries, the results of which could be demonstrated at any time and to any number of persons; the fundamental fact of the vanes being driven round by radiant force being thus put beyond dispute. And while, as I stated to you in my previous lecture, what at first seemed the obvious interpretation of this factnamely, that radiant force here acted in a manner altogether new to science, by direct mechanical impact on the vaneswas almost universally accepted by even the most distinguished Physicists, further investigations of the most ingenious and elaborate nature have now conclusively proved that the action is really an indirect one, capable of being accounted for on previously understood principles.-I hold the warning given by the history of this enquiry, in regard to the duty of the Scientific man to exhaust every possible mode of accounting for

new and strange phenomena, before attributing it to any previously unknown agency, to be one of the most valuable lessons afforded by Mr. Crookes's discov-

Now I maintain that it requires exactly the same kind of specially trained ability, to elicit the truth in regard to the phenomena we are now considering, as have been exerted in the researches made by the instrumentality of the Spectroscope and the Radiometer. And I cannot but believe that if Mr. Crookes had been prepared by a special training in the bodily and mental constitution, abnormal as well as normal, of the Human instruments of his Spiritualistic enquiries, and had devoted to them the ability, skill, perseverance, and freedom from prepossession, which he has shown in his Physical investigations, he would have arrived at conclusions more akin to those of the great body of scientific men whom I believe to share my own convictions on this subject,

So far are we from regarding Science as having unveiled all the mysteries of Nature, that we hold ourselves ready to accept any new agency, the evidence for which will stand the test of cross-examination by skilled experts. But, in default of such evidence, we are fully justified by experience, in regarding it as more probable that the most honest witnesses have either been intentionally deceived, or have deceived themselves, than that assertions in direct contradiction to all the 'natural knowledge' we possess should have any real justification

in fact.

In support of this position, I shall now show you that in every instance (so far as I am aware) in which a thorough investigation has been made into those 'higher phenomena' of Mesmerism which are adduced in support of Spiritualism, the supposed proof has completely failed, generally by the detection of intentional fraud; while it may be fairly presumed that the unexplained marvels of the same kind which are still appealed to as valid proofs, would be equally discredited by the like searching enquiry, since they rest on no better evidentiary foundation than seemed originally to be possessed by those which have entirely broken down

It was in France that the pretensions of mesmeric clairvoyance were first advanced; and it was by the French Academy of Medicine, in which the mesmeric state had been previously discussed with reference to the performance of surgical operations, that this new and more extraordinary claim was first carefully sifted; in consequence of the offer made in 1837 by M. Burdin (himself a member of that Academy) of a prize of 3,000 francs to any one who should be found capable of reading through opaque sub-The money was deposited in the hands of a notary for a period of two years, afterwards extended to three; the announcement was extensively published; numerous cases were offered for examination; every imaginable concession was made to the competitors, that was compatible with a thorough testing of the reality of the asserted power; and not one was found to stand the trial.

But not only was there complete and ignominious failure; the fraudulent mode in which the previous successes had been obtained was detected in two out of the three cases which were brought most prominently forward, and was made scarcely less evident in the third.

The first case was presented by M. Houblier, a physician of Provence, who, after a long period of preparation, sent his clairvoyante, Mlle. Emélie, to Paris, to the care of a friend and mesmeriser, M. Frappart. This gentleman, before presenting her to the Commissioners, thought it well to put her asserted power of reading with the back of her head to some preliminary trials: and soon finding reason to suspect her good faith, he set a trap for her, into which (supposing him to be her friend) she unsuspectingly fell. Very judiciously, however, he did not immediately expose her, but let her continue her performances; bringing up M. Houblier from Provence to meet other persons interested in the enquiry, that they might see for themselves through the keyhole of the room in which Mlle. Emélie was supposed to be lying entranced in a mesmeric sleep, that she got up and examined, here and there, the pages of the book—purposely left in the room-in which her alleged clairvoyant power was to be tested. Of course, Mlle. Emélie was never presented to the Commissioners of the Academy; and M. Houblier confessed with grief and shame that he had not only himself been for

four years the dupe of this maîtresse femme, but that he had unconsciously helped her to impose upon many most respectable persons in his own neighborhood. Now, all these, with M. Houblier himself, might be presumed to have been both competent and trustworthy witnesses; so that if M. Burdin's prize had never been offered, this case would have been put on record (like others of which I shall presently tell you) as an unimpeachable attestation of the reality of clairvoyance. Again, the immediate detection of the fraud, not by a hostile sceptic, but by a friendly mesmeriser, shows how easily, under the influence of a 'prepossession,' numbers of intelligent people may be led to surrender their common sense,' to the extent of believing, not only that the seat of vision may be transferred to the back of the head, but that a distinct picture of a page of a book can be formed without any optical apparatus. The conduct of M. Frappart in the matter should serve as a lesson to honest Spiritualists at the present time; who, when they begin to suspect trickery, would much better serve their own cause by helping to expose it, than by lending themselves to the defence of the trickster.

Among the earliest claimants of the Burdin prize was a M. Pigeaire of Montpellier; who affirmed that his daughter, a girl eleven years old, was able, when her eyes were completely blinded, to read with the points of her fingers, which then became her visual organs: the sole condition he required being that she should be blinded by himself with a bandage of black velvet. Her power of reading in this condition was attested by peers, deputies, physicians, distinguished littérateurs (amongst others, by George Sand) and newspaper editors, to whom it had been exhibited in Paris before she was presented to the Commission. But its members were nevertheless sceptical enough to require proof satisfactory to themselves; and desired to render the girl 'temporarily blind' (to use her father's words) by their own methods; objecting that his velvet bandage might be so disarranged by the working of her facial muscles, as to allow her to see downwards beneath its lower edge, when the book was held in a suitable position. M. Pigeaire, however, objecting to this

test, the Commissioners having satisfied themselves of the opacity of the bandage, stipulated only that the book should not be put into the girl's hands, to be held by her wherever she wished, but should be placed opposite her eyes at any distance her father should desire. As he would not consent to this condition, the Commissioners, of course, declined to accept his daughter's performances as not

furnishing any valid evidence of clairvoyance. Though the bandage was opaque, the trick now became transparent; yet it had taken-in peers, deputies, and George Sand; and only experts in such enquiries succeeded in discovering it.

The third case was brought forward by M. Teste, a well-known magnetiser of that date, who affirmed that every experienced mesmerist had witnessed the exercise of this faculty at least twenty times. Confident in his position, he offered to submit his clairvoyante (a young girl) to the experimentum crucisthe reading of print or writing enclosed in opaque boxes; stipulating only that the direction of the lines should be previously indicated. Such a box was prepared and placed in the girl's hands, with the required indication. Being presently asked by M. Teste whether she would be able to read what was in the interior of the box, she answered Oui; and on his asking her how soon, she replied confidently, dix minutes. She then turned the box about in her hands, and in doing so tore one of the bands that secured it. This being remarked upon, she made no further attempt of the same kind, but continued (as it appeared) to exert herself in fatiguing efforts to discern the concealed lines. Whole hours having thus passed, and M. Teste having asked his clairvoyante how many lines there were in the box, she answered deux. He then pressed her to read, and she announced that she saw the word nous, and later the word sommes. As she then declared that she could read no more, the box was taken from her hands, and the girl dismissed; and the box being then opened, the printed slip it contained was shown to M. Teste to have on it six lines of French poetry, in which neither of the words nous sommes occurred.

Of course this failure does not disprove any of M. Teste's assertions, either in regard to the same girl under other con-

ditions, or in regard to other alleged clairvoyantes; but it fully justifies the allegation, that as this was a picked case, presented by himself, near the expiration of the third year during which M. Burdin's prize was open, with unhesitating confidence in the girl's success, his other reported cases, of which not one rests upon better authority than his own, have not the least claim upon our acceptance. He seems to have been very easily satisfied; and it is clear that if he was not a consenting party, he was not adequately on his guard against the possibility of a furtive peep being taken by his clairvoyante into the interior of the box while it was being turned about in her hands,the method which Houdin avows himself to have practised in performing his 'second sight 'trick, and by which, as I shall presently tell you, one of our own most noted advocates of the 'transcendental' was afterwards completely taken in.

It was in 1844 that the clairvoyant Alexis came hither from Paris, with the reputation of extraordinary powers; and though these had not been submitted to the test of investigation by the French Academy of Medicine, it was confidently affirmed by the leading mesmerisers in this country, that there was nothing in the way of 'lucidity,' that this youth had not done and could not do. Not only had he divined the contents of sealed packets and thick wooden boxes, but he could give an exact account of the contents of any room in any house never before seen or heard of; he had described occurrences taking place at a distance, which, to the great surprise of the questioners (who expected something very different), were afterwards found to have transpired exactly as he had stated; he had revealed to persons anxious to recover important papers the unknown places of their lodgment; in fact, if all was true that was affirmed of him, the power for which he could claim credit would have been little less than omniscience—if only it could have been commanded at will. But, by the admission of his best friends, it was extremely variable, coming in gushes or flashes; while, as he was often unable to see clearly at first, and had an unfortunate habit of 'thinking aloud,' he continually made a great many blunders before he arrived at anything like the truth.

Having myself settled in the neighborhood of London just as Alexis came over, and having found my friend Dr. Forbes (then editor of the British and Foreign Medical Review) extremely interested in the enquiry into the reality of his asserted clairvoyant powers, I accompanied Dr. F., time after time, to public and private séances at which these powers were exhibited, though not adequately tested. So far from being at that time an opponent, I was much more nearly a believer; the weight of testimony seemed too strong to be overborne; and it was only after repeated experience of the numerous sources of fallacy which the keen-sightedness of Dr. Forbes enabled him to discern, that I became, like him, a sceptic as to the reality of Alexis's reputed clairvoyance. My scepticism was increased by seeing how, whilst he was 'thinking aloud' (according to his friends), but 'fishing' or 'pumping' (according to unbelievers), he was helped by the information he gleaned from the unconscious promptings of his questioners. And my confidence in testimony was greatly weakened, by finding that extraordinary successes were reported to have been obtained in some cases which Dr. Forbes and I regarded as utter failures, as well as in others in which it was clear to us that no adequate precautions had been taken to prevent the use of ordinary vision. For we satisfied ourselves that when he was going to read or to play cards with his eyes bandaged, it was his habit so to manœuvre, as to prevent the bandage from being drawn tight,-cela m'étouffe being his constant complaint, even when his nostrils were left perfectly free; and that at first, when he could not see under its lower edge, he worked the muscles of his face until he displaced it sufficiently for his purpose. And thus we came to the conclusion that no test of his 'lucidity' could be of any value, which did not involve the reading of print or writing enclosed in perfectly opaque boxes or other envelopes, without the asistance of any response to his guesses. A test-séance of this kind having been arranged by Dr. Forbes at his own house, the general result (as admitted by M. Marcillet, the mesmeriser who accompanied Alexis) was utter failure; the only noteworthy exception being in named, without hesitation, the word writ-

a case in which, having selected the thinnest of the paper envelopes, Alexis correctly stated that the word within it consisted of three letters, without, however, being able to name them. And the value of even this very slight success was afterwards completely neutralised by the discovery I shall recount in connection with the case of the brother and successor of Alexis, that nothing else than ordinary vision was required to obtain it.

As M. Marcillet could not dispute the fairness with which the investigation was conducted, he could offer no other explanation of Alexis's failure on this occasion, than the presence of an 'atmosphere of incredibility 'emanating from the persons of the sceptical doctors present. It may be shrewdly suspected, however, that Alexis recognised the presence of a maître homme in clear-sightedness, and felt himself foiled at every point by the keener intelligence of Dr. Forbes. For he and M. Marcillet forthwith left London for Paris, and never publicly reap-

peared in this country.

His place, however, was taken after a year or two by his brother Adolphe, whose powers were highly vaunted by believers as even surpassing those of his predecessor. Again Dr. Forbes applied himself to the investigation; and again I took every opportunity afforded me of witnessing their exercise. It was at a public séance at which I was myself present, though Dr. Forbes was not, that a circumstance occurred which made at the time a considerable impression. Slips of writing-paper having been distributed, any person who wished to put Adolphe's powers to the test was desired to write a word at the top of the slip, and then to fold it over and over several times, so that the writing should be covered both in front and behind by two or three layers of the paper. Having myself written Paris, I folded it up in the prescribed manner; my friend Mr. Ottley wrote Toulon; several other persons did the like; and we satisfied ourselves, by holding up our folded slips between our eyes and the light, that the writing within was completely invisible. Yet, taking one of them after another into his hands, and making no attempt to unfold the papers (some of which, I think, were secured by seal or wafer), Adolphe ten on each. Within a day or two, however, I learned from Mr. Ottley that his sister had discovered that she could read by her natural eyesight the writing on his slip, which it was supposed could only be discerned by clairvoyant power; and on trying her method upon my own slip, I found myself able to do the same. The secret consisted in holding the slip, not between the eye and the light, but in such a position that the light of the window or lamp should be reflected obliquely from its surface. And any of you will find that after a little practice, words written in a legible but not large hand can be thus read, though covered by three folds of ordinary writing-paper. This discovery fully accounts for various successes, as well of Alexis and Adolphe, as of other reputed clairvoyants; and affords a further warning as to the scrupulous care required to exclude all possible sources of fallacy in conducting such trials.

The conclusions drawn by Dr. Forbes from his critical examination of Adolphe's pretensions tallied exactly with those to which he had been led by his previous search. All the instances of success could be fairly explained without crediting the performer with any extraordinary powers; where, on the other hand, due care was taken to render the ordinary operation of the visual sense impossible. failure invariably resulted. Thus the claims of Adolphe, like those of Alexis, vanished into thin air at the wand of the expert; and, notwithstanding the great efforts made to rehabilitate his reputation, he soon found his stay in London no longer profitable, and went the way of his predecessor. Nothing, so far as I am aware, has ever been since heard of this par nobile fratrum; certainly they never challenged the French Academy of Medicine to an investigation of their pretensions.

And so it always proves in the end with these sham marvels; which, however specious they may appear at a distance, vanish under critical investigation like the mirage of the desert on nearer ap-The real marvels of Science, on the other hand, not only stand the test of the most critical examination, but prove more marvellous the more thoroughly they are investigated. Reason,

Imagination scarcely dares to follow. And those who desire to find a true spring at which to slake their thirst for knowledge, need only follow the guidance of the Spectroscope and the Radiometer, to be led to wonders of which neither the Poughkeepsie Seer,' the 'Seeress of Prevorst,' nor any other of the reputed prophets' of Mesmerism or Spiritualism had ever dreamed.

My anxiety to impress on you the lessons which (as it seems to me) such exposures ought to afford in regard to the object of our present enquiry, leads me to ask your further attention to two other cases; in each of which a number of apparent successes of a most remarkable kind were obtained by what was subsequently shown to have been an ingenious fraud, practised upon the honest patron of the performer, who was (like M. Houblier) his unsuspecting dupe.

In the course of his further search for clairvoyance, Dr. Forbes was requested by a legal gentleman whom he calls Mr. A. B., to witness the performances of a copying clerk in his employ, by name George Goble; whom he stated to be capable, in a large proportion of cases, of reading printed words enclosed in opaque boxes, without either mistake or preliminary guessing. Being at that time in the country, I did not accompany Dr. Forbes in his repeated visits to Mr. A. B.'s chambers; but I well remember his writing to me in some excitement after the first of them, that at last he seemed to have got hold of a genuine case of clairvoyance. He soon, however, recovered his equanimity and his scepticism, and felt that he must make a much more thorough enquiry before he could be justified in accepting the case as genuine. George's dodge consisted (as was subsequently proved) in furtively opening the box or other envelope so as to get a peep at its contents, whilst sitting or lying face downwards on a sofa; and in managing to conceal his having done so by tearing open the box at the moment he proclaimed the word: his failures occurring when the box was so secured that he could not succeed in opening it, after manœuvring (it might be) for half an hour or more. Finding that in every one of George's successes the envelope might have been opened, whilst all the it has well been said, can guide where cases in which the boxes had certainly not been opened were complete failuresa consideration which, though very obvious, seemed never to have suggested itself to the legal mind of George's patron
—Dr. Forbes and Professor Sharpey (whom he had taken into council) devised a simple 'counter-dodge,' by which it should be rendered impossible for George to open the box for the purpose of reading the contained word, without the detection of his trick. This entirely succeeded; George was brought upon his knees and confessed his roguery, but protested that it was his first offence. You would scarcely credit the fact if it had not been self-recorded, that George's patron still continued to believe in his clairvoyant power; accepting his assur-ance that he had only had recourse to trickery when the genuine power failed him, and requesting Dr. Forbes to give him another trial. This Dr. F. consented to make, upon the sole condition that a small sealed box, containing a single word printed in large type, should be returned to him unopened with the word written upon the outside of it. Some days elapsed before George's 'lucidity' recovered from the shock of the exposure; but his master then informed Dr. F. that G. had read the word IMPLEMENTS, or, as he spelled it, impelments, with great assurance of correctness. This, however, proving altogether wrong, the box was left in Mr. A. B.'s hands for a further space of two months, and no second guess having been then made, the real word was disclosed by Dr. F. to be OB-JECTIONS.

The history of this enquiry, as detailed by Dr. Forbes, brings into the strongest contrast the patient and honest search for truth of the cautious sceptic, willing to be convinced if satisfactory evidence could be adduced, and the ready credulity of the enthusiastic disciple, who not only eagerly accepted a conclusion opposed to universal experience without taking any adequate precautions against trickery, but held to that conclusion after the trick had been not only exposed but confessed. And here, again, we see how, but for the interposition of a sceptical 'expert,' a case of sham clairvoyance would have been published to the world with the same unhesitating affirmation of its genuineness, as that which now claims credit for the exercise of 'psychic force' in causing accordions to play, and heavy tables to turn round or even rise in the air, without muscular agency.

air, without muscular agency. In the other case, I have now to mention-that of Mr. Hewes' 'Jack,' publicly exhibited at Manchester about the same time that Alexis was performing in London-the proof of clairvoyance, as shown in reading when the eyes had been effectually closed, seemed as complete as it was possible to obtain. Jack's eyelids were bound down by surgeons of that town (who were assuredly not confederates) with strips of adhesive plaster, over which were placed folds of leather, which again were kept in place by other plasters; the only condition made by Mr. Hewes being that the ridges of the eyebrows should not be covered, as it was there that Jack saw when 'lucid.' The results were truly surprising; there was no guessing, no need of prompting, no failure; 'Jack' read off, without the least hesitation, everything that was presented to him. The local newspapers were full of this new wonder; and no documentary testimony in favor of clair-voyance could possibly be more conclu-sive. Put, as usual, the marvel would not stand the test of close examination. A young Manchester surgeon, who had been experimenting upon himself, gave a public exhibition of his power of reading when his eyes had been 'made up' in precisely the same manner as 'Jack's,' and by the same gentlemen; the means he adopted being simply to work the muscles of his face, until he so far loosened the plasters as to obtain a crevice through which he could read by looking upwards. Mr. Hewes, who witnessed this performance, readily agreed that Jack' should be further tested; and it was settled, en petite comité, that after protecting his eyelashes with narrow strips of plaster, his eyelids should be covered with a thick coating of shoemakers' wax, leaving the superciliary ridges free. When this was done (not without considerable resistance on the part of Jack,' only kept under by the influence of his patron), the clairvoyant power was completely annihilated; but one thing Jack' plainly saw, even with his eyes shut-that 'his little game was up.'

^{*} Illustrations of Modern Mesmerism from personal investigation. London: (Churchill) 1854.

patron, a gentleman of independent fortune, who had become an active propagandist of the belief he had honestly embraced, returned all the money which had been received for Jack's performances, and Jack withdrew into private life.

Now I readily concede that neither the detection of 'Jack' and George Goble, nor the failure of Alexis and Adolphe under test-conditions, disproves the reality of clairvoyance; but my position is, that since the choicest examples of its manifestation are found to break down when thoroughly investigated, not one of the reported instances in which no such thorough investigation has been made, has the least claim to be accepted as genuine. It must, I think, have become abundantly obvious to you, that until the existence of the clairvoyant power shall have been established beyond question, by every test that the skill of the most wary and inveterate sceptic can devise, the scientific expert is fully justified in refusing to accept the testimony of any number of witnesses, however honest, but of no special intelligence in regard to the subject of the enquiry, as to particular instances of this power. George Goble's master would have recounted the performances of his protégé in perfect good faith, and would have been very angry with any one who should express a doubt either of his veracity or his competence. And not only Mr. Hewes, but a large body of lookers-on, would have stoutly contended for the impossibility of 'Jack' having read with his eyes when they had been carefully covered by a surgeon with plasters and leather. But to me it seems the 'common sense' view of the matter, that the fact of 'Jack' having read with his eyes covered should have been accepted as a proof-not of his clairvoyance -but of his eyes not having been effectually covered; and that the very fact of George Goble having found out the words in certain boxes which he might have opened, while he did not find out any in the boxes he could not open, should have been accepted as valid evidence-not of his clairvoyance-but of his having taken a furtive peep with his natural eyes into the unsecured boxes. And in both cases 'common sense' would have been justified by the results.

The ordinary rules of evidence, as I

have endeavored to show you, apply only to ordinary occurrences. To establish the reality of such an extraordinary condition as clairvoyance, extraordinary evidence is required; and it is the entire absence of this, which vitiates the whole body of testimony put forward by Prof. Gregory (Letters on Animal Magnetism), doubtless with the most complete good faith, in regard to the performances of Major Buckley's clairvoyantes; whom he states to have collectively read the mottoes enclosed in 4,860 nut-shells (one of them consisting of 98 words), and upwards of 36,000 words on papers enclosed in boxes, one of these papers containing 371 words. Now, that Prof. Gregory lent not only himself, and the authority of his public position, with reprehensible facility, to the attestation of Major Buckley's statements, might be fairly concluded from his eager endorsement of Reichenbach's doctrines, of which I spoke in my previous lecture; and the complete untrustworthiness of his statements in regard to clairvoyance becomes obvious to any sceptical reader of his 'Letters.' For not only is there an entire absence of detail, in regard to the precautions taken to prevent the ingenious tricks, to which (as all previous experience indicated) the claimants to this power are accustomed to have recourse; but the narrative of one of his cases shows such an easy credulity on the very face of it, as at once to deprive his other statements of the least claim to credence. I refer to that (p. 364) in which folded papers or sealed envelopes were forwarded to the clairvoyantes, who returned them-the seals apparently unbrokenwith a correct statement of the contained words. Now the unsealing of sealed letters, and the resealing them so as to conceal their having been opened, are practised on occasion in the Post-office of probably every Continental capital, if not in our own; and, as some of you have probably seen in the public prints, the doings in this line of a 'medium' who professed to be able to return answers under spiritual influence to questions contained in sealed letters, have lately been exposed in the Law-courts of New York; the medium's own wife disclosing the manner in which the unsealing and resealing of these letters were effected. Common sense, it might have been

thought, would dictate that if the contents of a sealed letter had been made known by a person in whose possession it had lain, that letter had been opened and resealed. Yet Prof. Gregory preferred to believe that these letters had been read by clairvoyance; and numbers of persons in various parts of the Union, including many of high social consideration, were found to place such confidence in the 'spiritual' pretensions of the New York swindler, as to submit to him questions of the most private nature, with fees that gave him an annual income of more than a thousand pounds!

It was to put the value of Professor Gregory's evidence in support of clairvoyance to the test, that his colleague, Dr. (afterwards Sir James) Simpson, offered a bank-note of large value, enclosed in a sealed box and placed in the hands of a public official in Edinburgh, as a prize to any one who could read its number; and I am informed by Sir Dominic Corrigan, M.P., that Sir Philip Crampton (Surgeon to the Queen in Ireland) did the like in Dublin. Though these rich prizes remained open to all comers for at least a year, none of Major Buckley's one hundred and fortyeight clairvoyantes succeeded in establishing a claim to either of them; in fact, I believe that not even a single attempt was made. And yet there are even now men of high scientific distinction who adduce Professor Gregory's testimony on this subject as unimpeachable! *

Still more akin to the powers claimed for Spiritualistic 'mediums,' is that form of alleged Mesmeric clairvoyance which consists in the vision of scenes or occurrences at a distance; so that they are described exactly as they are at the time, and not according to the expectation of the questioners. Numerous cases of this kind have been very circumstantially recorded; and I most freely admit that a body of thoroughly well-attested and well-sifted evidence in their favor would present a strong claim to acceptance. Every one knows, however, that plenty of marvels of the same class have been current as 'ghost stories;' and that even some of what were regarded as the best attested of these, have faded out of the credit they once enjoyed under the advancing light of a healthy Rationalism. And while such as have a 'transcendental' turn of mind will accept the most wonderful story of clairvoyance at a distance with little or no hesitation, those of a more sceptical habit will admit none that has not been subjected to the test of a searching cross-examination; thinking it more probable that some latent fallacy is concealed beneath the ostensible facts, than that anything so marvellous should have really happened.

My own attention was very early drawn to this subject, by certain occurrences which fell under my immediate observation. A Mesmeric somnambule said to be possessed of this power of 'mental travelling' being the subject of a séance at my own house, and being directed to describe what she saw in the rooms above, gave a correct and unhesitating reply as to the occupants of my nursery; whilst in regard to the very unusual contents of a store-room above, she was entirely at fault, until I purposely prompted her by leading questions. The next day I found out that she had enjoyed ample previous opportunities of information as to the points which she had described correctly; whilst it soon came to my knowledge that a most circumstantial narrative was current in Bristol (where I then resided) of her extraordinary success in discerning the very objects in the store-room which she had entirely failed to see. Here, then, was a marked instance of two sources of fallacy in narratives of this description; first, the disposition to attribute to 'occult' agencies what may be readily explained by natural causes; and second, the 'myth-mak-

^{*} It was publicly suggested by Mr. Wallace at the Glasgow Meeting of the British Associa-tion, that the failure of the clairvoyantes in the case of Dr. Simpson's bank-note might be due to there having been really no note placed in the box. This suggestion I indignantly repudiated at the time, as an unworthy imputation upon the character of a public man whose honesty was above all suspicion. But I might have replied that if the fact had been so, some of Major Buckley's 148 clairvoyantes ought to have found it out. Dr. Simpson informed me that on asking Dr. Gregory the reason of their complete abstention, he could give no other account of it, than that the very offer of the reward, by introducing a selfish motive for the exercise of this power, prevented its access; as if Alexis, Adolphe, and numerous other professors of the art of reading without eyes, had not been daily practising it for the purpose of pecuniary gain.

ing' tendency—far more general than is commonly supposed—which, as I have already shown you, builds up the most elaborate constructions of fiction upon the slenderest foundation of fact.

In my interviews with Alexis and Adolphe, also, both of whom were reputed to possess a very high degree of this power, I tested them as to the contents of my house, which they described in a vague and general way that would apply to almost any ordinary domicile. But both of them spoke of my drawing-room as having pictures on its walls, which was not the fact; and neither of them, though pressed as to something very conspicuous which they could not help seeing, gave the least hint of the presence of an organ with gilt pipes. Their failure with me does not, of course, invalidate any real successes they may have gained with others; but my previous experience had led me to entertain grave doubts as to the reality of the reputed successes; and these doubts were subsequently strengthened by the complete break-down, under the persevering and sagacious enquiries prosecuted by Dr. Forbes, of a most notable case which excited great public interest at the time.

The wonderful performances of Miss Martineau's servant J., which she announced to the public in 1844, through the medium of the Athenæum, culminated in a detailed description—given by J. in the mesmeric sleep—of the particulars of the wreck of a vessel of which her cousin was one of the crew, as also of the previous loss of a boy overboard; with which particulars it was positively affirmed by Miss Martineau, and believed by many on her authority, that the girl could not possibly have been previously informed, as her aunt had only brought the account to the house when the séance was nearly terminated. On being asked, says Miss M., two evenings afterwards, when again in the sleep, whether she had come to know what she related by seeing her aunt telling the people below, J. replied 'No; I saw the place and the people themselves-like a vision.' And Miss Martineau believed her.

My sceptical friend Dr. Forbes, however, would not pin his faith to hers; and determined to institute, through a medical friend on the spot, a more search-

ing investigation than Miss M. had thought necessary. The result of this inquiry was to prove, unequivocally, that J.'s aunt had told the whole story to her sister, in whose house Miss M. was residing, about three hours before the séance; and that, though J. was not then in the room, the circumstances were fully discussed in her presence before she was summoned to the mesmeric performance. Thus not only was J. completely discredited as a seer; but the value of all testimony to such marvels was seriously lowered, when so honest and intelligent a witness as Harriet Martineau could be so completely led astray by her 'prepossession,' as to put forth statements as facts, which were at once upset by the careful enquiry which she ought herself to have made before committing herself to them.

It is the wise rule of our law, that no Evidence (save that of dying declarations) is admissible in Court, that is not capable of being tested by cross-examination; and no well-trained investigator will put forth a new discovery in Science, until he has verified it by 'putting it to the question' in every mode he can think of.

If, in the case I have just cited, the common sense' view had been taken from the beginning, the correspondence of I.'s circumstantial narrative with the actual facts of the case, would have been accepted as proving-not that she had received them in mesmeric vision-but that she had learned them through some ordinary channel; and the truth of this conclusion would have at once become apparent, when the proper means were taken to verify it. The same ground should (I contend) be taken, in regard to all the marvels of this class which rest on the testimony of believers only. For no one of them is better attested than that which I have just cited; and until the evidence in support of any case of clairvoyance can be shown to have been sifted in the same thorough manner, I maintain that it has no more claim on our acceptance, than has the specious opening of a case in a court of law, before it has been subjected to the hostile scrutiny of the counsel on the other side.

I need not detain you long with the scientific discussion of the phenomena of Table-turning and Table-talking; since

no facts have been established in regard to them, which are not susceptible of a very simple explanation. A number of persons seat themselves round a table, and place their hands upon it, with a preconceived idea that the table will turn; and after some time, it may be, during which the movement has been attentively waited for, the rotation begins. If the parties retain their seats, the turning only takes place as far as the length of their arms allows, but not unfrequently they all rise, feeling themselves obliged (as they assert) to follow the table; and, from a walk, their pace may be accelerated to a run, until the table actually spins round so fast that they can no longer keep up with it. And as this happens, not merely without any consciousness on the part of the performers that they are exercising any force of their own, but for the most part under the full conviction that they do not; and since, moreover, tables thus move, which the performers declare themselves unable to move to the same extent by any voluntary effort, it is not unnatural that they should conclude that some other force than their own muscular action must have put it in motion.

But the man of science, whether Physicist or Physiologist, cannot rest content without adequate proof of this conclusion; and a test is very easily applied. You see here a little apparatus consisting of two pieces of board, two cedar pencils, two india-rubber bands, two pins, and a slender index-rod; which was devised by Faraday to ascertain whether the table ever moves round without a lateral pressure from the hands of the operators. For this 'indicator' is so constructed, that when the hands are placed upon it, instead of immediately upon the table, any lateral pressure exerted by them makes the upper board roll upon the lower; and the slightest movement of this kind is so magnified by the leverage of the index, as to show itself by a very decided motion of its point in the opposite direction. By this simple test, any one may experimentally satisfy himself that the table never goes round unless the index of the 'indicator' shows that lateral muscular pressure is being exerted in the direction of its movement; and, conversely, that when such lateral pressure, as shown by the 'indicator,' is be-

ing adequately exerted, the table moves round. The Physicist, therefore, has a right to assert, that, until a table shall be found to turn without lateral pressure of the hands laid upon the 'indicator,' as shown by the fixity of its index, there is no evidence whatever of the exertion of any other force than the muscular action of the operators. And the Physiologist who is familiar with the fact that every human being is continually putting forth a vast amount of muscular energy, of the exercise of which he is entirely unconscious, and who has also studied that unconscious influence of mental preconception, of which I have already given you illustrations in the pendule explorateur, at once perceives that the absence of any consciousness of exertion on the part of the operators, affords no proof whatever that it is not being put forth; while he is further well aware that involuntary muscular contractions are often far more powerful than any which the will can excite.

The same explanation applies to the tilting of the table, which is made in response to questions asked of 'the spirits' by which it is supposed to be influenced. Nothing but a strange prepossession in favor of some 'occult' agency can attribute such tilting to anything but the downward pressure of the hands laid upon it; the hypothetic exertion of any other force being scientifically inadmissible, until it shall have been experimentally shown that the table tilts without being manually pressed down. An 'indicator' might be easily constructed, which should test downward pressure, on the same principle that Faraday's indicator tests lateral pressure; but no one, so far as I am aware, has ever ventured to affirm that he has thus demonstrated the absence of muscular pressure, although I long since pointed out that only in this manner could the matter be scientifically tested. Until such demonstration shall have been given, the tilting -like the turning-of tables, may be unhesitatingly attributed to the unconscious muscular action of the operators; while the answers which are brought out by its instrumentality may be shown to be the expressions, either-like the movements of the pendule explorateurof ideas actually present to the mind of one or other of the performers; or-as

allied states-of past ideas which have left their traces in the brain, although they have dropped out of the conscious

memory.

That such is the nature of the responses ordinarily obtained by those, who (in entire good faith) have practised this 'curious art' in any of its varied forms -including planchette writing-I have elsewhere shown * by the analysis of a number of cases observed by myself and recorded by others. And there is this very curious indication of it: that when the 'table-talking' epidemic first spread in this country, a number of low-church clergymen, strongly imbued with the belief that it was a manifestation of Satanic agency, put to the tables a series of what they regarded as test questions, and got just the answers they expected.

I now come to the existing phase of the Epidemic belief in the 'occult,' which, as I have already pointed out, differs from the preceding rather in its outward manifestations than in its essential nature. You have all heard of the ghostly visitations, which, in the days of our ancestors, were reputed to have disclosed by means of raps the place in which treasure had been hidden, or a murdered corpse had been buried. Ghosts, however, like Witchcraft, seemed to have lost credit with the present generation, until brought into vogue again as 'spirits' by the Rochester rappings. A family of the name of Fox, including two girls aged respectively about nine and eleven years, went to inhabit a house at Hydesville (Rochester County, New York State), in which a murder was said to have been committed many years before. They had not resided in it long, when raps were heard in the girls' chamber; sometimes obviously issuing from their persons, but sometimes apparently proceeding from other parts of the room. Curiosity was excited; the neighborhood flocked to witness the marvel; no one could detect any movement on the part of either of the girls while the raps were sounding; and no concealed instrumentality could be discovered by careful search. The rappings soon began to show a certain coherence; a code of sig-

often occurs in Somnambulism and other nals was arranged, according to which one rap was to mean no, three raps yes, and two raps doubtful or wait; and communications having been thus opened with the rappers, visitors were enabled, through the medium of these two girls, to summon and interrogate spirits of their departed friends. Multitudes now flocked from all parts to witness the phenomena; and the girls having gone to live with an elder married sister at Rochester town, the alphabetical system was established at her suggestion; which enabled the spirits to spell out their messages by rapping at the required letter, when either the alphabet was repeated by the inquirer, or the letters on an alphabet-card were successively pointed to. The excitement continuing to increase, a Committee of Investigation was appointed by a town-meeting. Every opportunity was given for the enquiry; but the committee was completely baffled. The enquiry was taken up, however, by an eminent anatomist, Dr. Austin Flint, of New York; who, having first convinced himself that the sounds issued from the legs or feet of the girls themselves, notwithstanding their apparent stiilness, sought for a physiological explanation of them; and soon found one in the power which certain persons can acquire, of giving a jerking or snapping action to particular tendons of either the knees, ankles, or toes,—a patient of his own being able thus to produce an exact imitation of the Rochester rappings. But the very rationality of this explanation caused it to be disbelieved by such as were anxious to be placed in communication with the spirit-world. fame of the Fox girls spread through the United States; they established themselves as 'mediums' in New York; and before long they were drawing a large income from the pockets of their credulous visitors.

Under the fostering influence of pecuniary temptation, imitators soon sprang up in various parts of the United States; 'mediums' became numerous; and one of them, Mrs. Hayden, brought the contagion to this country, where the 'spiritrapping' Epidemic rapidly spread. Before speaking of her performances, I may mention that Prof. Schiff, since of Florence, not only himself acquired the power of producing the raps by the repeated

^{*} Quarterly Review, October 1853, p. 550 et seq.; and October 1871, pp. 312-322.

displacement of a tendon which slides through a sheath behind the external protuberance of the ankle; but exhibited this acquirement to the French Academy of Medicine in April, 1859, baring his legs, and producing the raps without any apparent movement. And not more than six years ago, a female relative of the Fox family made a deposition before the magistrates of the town in which she resided; stating that while visiting the girls at Rochester many years before, she had become acquainted with the entire secret, which she fully disclosed; herself reproducing the raps in verification of her narrative. The manner in which, both according to this lady's account, and the experience of those who witnessed Mrs. Hayden's performances, the 'medium' divined at what letters to make the raps, was very simple; consisting merely in carefully watching the countenance or gestures of the questioner, who almost invariably gives, in some way or other, involuntary expression to his or her expectancy. Of this I could cite many proofs. An eminent scientific friend told me that having been at a party by one member of which after another Mrs. Hayden's powers were tested, he was at first greatly surprised at the accuracy of the replies he obtained regarding the name, date of death, and place of death, of a deceased friend of whom he was thinking; but that he soon obtained a clue, by observing that her success varied with the demonstrativeness of the individual, and that she utterly failed with one of peculiarly imperturbable habit. He then made a fresh trial, with the fixed predetermination to withhold any manifestation of his expectancy; and Mrs. Hayden was completely baffled. The secret was divined by Professor Edward Forbes also, who, by pausing on particular letters, made Mrs. Hayden spell 'Lord Tomnoddy' and other waggeries. And the most complete exposure of the trick was given by Mr. G. H. K. Lewes; who caused Mrs. Hayden to rap out the most absurd replies to questions which he had previously written down and communicated to another member of the party: finally obtaining, in answer to the question 'Is Mrs. Hayden an impostor?' three unhesitating raps at the letters Y, E, S.*

* Mr. Wallace explains this result by assum-

In the 'Report on Spiritualism of the Committee of the London Dialectical Society,' you will find that Dr. Edmunds, the chairman of that Committee, not only detected a well-known professional 'medium' in making the raps with her foot, but observed that she regulated her raps by intently watching the questioner, and that when she was prevented from doing this by the interposition of a screen, her raps were altogether meaningless.* My own experience with other 'mediums' has been to exactly the same effect; one instance being particularly noteworthy. Mr. Foster had correctly indicated the name and year of death of a deceased friend, but he hesitated at the month; rapping distinctly at J U, but being obviously puzzled as to whether the next letter should be L (for July) or N (for June). The secret of this was, that though I knew the event to have happened in one of these two months, I could not myself recollect which.

Of the 'higher phenomena' of Spiritualism—the 'levitation' of chairs and

ing that the raps were caused by 'invisible beings,' who, reading what was in the questioner's mind, answered a fool according to his folly.

*This circumstance may be adduced as an example of that power of 'thought reading' on the part of the medium, which has been affirmed to be possessed by certain individuals whose own honest belief in it seems (as in the case of the divining-rod) to be beyond reasonable question. But as I found, on a subsequent occasion, that the interposition of a screen between Mr. Foster and myself was quite sufficient to interrupt the spelling-out of a name, the component letters of which he had given correctly up to that point, I think it much more reasonable to suppose that I did give some involuntary indication, by look or gesture, of the letters which would form the answer in my mind, although endeavoring to the utmost to restrain myself from doing so.

† Much stress is laid by the Editor of the Spectator upon a statement made by the late Professor De Morgan, that Mrs. Hayden's success was not interfered with by the interposition of a screen. But I have it on the authority of an eminent scientific colleague of Professor De Morgan's, who was repeatedly present at the spiritualistic stances held at his house, that the experiments were habitually conducted there in so loose a manner as to be altogether unsatisfactory; frauds of the most transparent kind (which he himself more than once exposed) being accepted as valid proofs; and non-natural interpretations being always preferred when natural explanations were obvious.

tables, and even of men and women; the 'elongation' of Mr. Home's body, his handling of heated bodies, and his heaping hot coals on the head of a bald gentleman without any discomfort to him; the untying of knots and change of coats; the production of 'spiritual photographs;' the bringing-in of fruits, flowers, live lobsters, in dark séances, and the like-I have left myself no time to speak. The very catalogue speaks, to any sober and unprepossessed mind, of the extreme improbability that any 'spiritual' agents should so manifest their presence. And in regard to the spirit-writing by pens or pencils, I can only say that of the revelations given by its means, I have seen none that could claim any higher character than that of unmitigated 'twaddle.' It is because the present generation knows little of the history of former Epidemics of this kind, and is therefore not in a position to profit by the experience they have afforded, that I have rather dwelt in these lectures on the lessons of the past in regard to the credibility of testimony on these subjects, than discussed the truth or falsehood of statements now in currency in regard to the recent doings of 'the spirits.' It is not because I have not investigated Spiritualism for myself, that I refrain from bringing before you in detail the results of my inquiries. I devoted, at the outbreak of the epidemic, an amount of time and attention which might have been far more profitably employed, to the examination of its pretensions; and it was only after I had satisfied myself by long and careful study that its character was fundamentally the same with that of the epidemics I had previously witnessed, differing only in the particular form of its manifestations, that I gave up the enquiry. I could not afford to sacrifice the time that might be much more profitably spent in adding to our stock of real knowledge, in the (so-called) scientific investigation of such performances as those of the 'Davenport Brothers;' when I found that the investigation was to be so carried on, that I should be precluded from using either my eyes or my hands, the most important instruments of scientific enquiry. I felt assured that these performances would turn out to be mere conjuring tricks: and that they really are so has been

shown, not merely by Mr. Maskelyne's discovery of the secret, and his repetition of the performances as conjuring tricks, but by the recent public expose of the whole method, in Boston (N.E.), by one who formerly practised it for gain. So, again, in other cases in which I strongly suspected the supposed 'spiritualistic' manifestations to be intentional deceptions, and proposed their repetition under test-conditions admitted to be fair, I waited hour after hour for the manifestations, the non-production of which was attributed to my 'atmosphere of incre-

dulity.'

Thus, having accompanied a scientific friend to a Spiritualistic séance, at which we saw a small light table dance up and down under the hands of a professional 'medium' (Mrs. M.) as she moved across the room, I pointed out to my friend, who regarded this as an example of 'spiritual' agency, that since the 'medium' wore a large crinoline which completely concealed her feet, it was quite possible for her to have lifted the table upon one foot, while moving across the room on the other-as any opera-dancer could do. My friend, candidly admitting the possibility of this explanation, subsequently invited me to a séance at his own house, with a non-professional 'medium,' and asked me if I was satisfied with the crinoline-guard' of wire and paper, which he had so placed round the legs of a small table, that the 'medium' could not lift the table on her foot without breaking through the 'guard.' I replied that I was perfectly satisfied, and that if I should see the table dance up and down under his 'medium's 'hands, in the same manner as at Mrs. M.'s, I should admit that it was a case for further investigation. During a séance of two hours, however, no other manifestation took place than 'raps,' indicating the presence of 'spirits;' the interposition of the 'crinoline guard 'apparently keeping them away from the table.*

[&]quot;Since the delivery of this lecture, Mr. Wallace has publicly avowed himself to be the 'scientific friend' to whom I referred; and has asserted that on subsequent occasions the table did rise within the 'crinoline guard.' Has it ever done so, I ask, in the presence of a sceptical expert? With reference to the charge which Mr. Wallace makes against me of 'habitually giving only one side of the ques-

In regard to professional 'mediums' who make their living by the exercise of their supposed gifts, I came to the conclusion that we have as much right to assume fraud until the contrary shall have been proved, as we have in the case of a gipsy fortune-teller, who has managed to learn a good deal about the chief people of the country neighborhood into which she comes, before she allows herself to be consulted, and then astonishes her credulous clients by the knowledge of their affairs which she displays. need not tell you how one after another of such pretenders has been detected in England. In Paris the frauds of a 'spiritual' Photographic establishment were brought into the law courts, and the persons concerned in them sentenced to severe punishment, a year or two ago. And in America, the 'Katie King' imposture, which had deluded some of the leading spiritualists in this country, as well as in the United States, was publicly exposed at about the same time.

But, it is affirmed, such exposures prove nothing against the genuineness of any new manifestation. I quite admit this. But I affirm that to any one accustomed to weigh the value of evidence, the fact that the testimony in favor of a whole series of antecedent claims has been completely upset, seriously invalidates (as I have shown in regard to mesmeric clairvoyance) the trustworthiness of the testimony in favor of any new claimant to occult powers. Why should I believe the testimony of any believer in the genuineness of D's performances, when he has been obliged to admit that he has been 'egregiously deceived in the cases of A, B, and C?

The case is not essentially different in regard to 'mediums' who do not practise for gain. For it is perfectly well known to those who have had large experience in these matters, that there is a class of persons (especially, I am sorry to have to say it, of the female sex) who have an extraordinary proclivity to deceit, even

from a very early period of life; and who enjoy nothing better than 'takingin' older and wiser people, even when doing so brings no special advantage to themselves. Every medical man of large experience has met with cases in which young ladies have imposed in this way, by feigning disease, not only upon their families, but upon their previous doctors; the supposed patients sometimes undergoing very severe treatment for its cure. And when the new attendant has sagaciously found out the cheat, and has honestly exposed it to the parents, he is in general 'morally' kicked out of the house for his unfounded aspersion; not every one having the good fortune of my old friend Dr. A. T. Thompson, who was sent for some years afterwards by a young married lady to attend her family, on account of the high opinion she had formed of his ability, as the only one of the many doctors formerly consulted about her, who had found out the real nature of her case. I could tell you the particulars, in my possession, of the detection of the imposture practised by one of the most noteworthy of these lady-mediums, in the distribution of flowers which she averred to be brought in by the 'spirits' in a dark séance, fresh from the garden, and wet with the dew of heaven; the flowers having been previously collected in a basin up-stairs, and watered out of a decanter standing by, into which an inquisitive sceptic had furtively introduced a small quantity of a nearly colorless salt (ferrocyanide of potassium), the presence of which in the 'dew' of the flowers was afterwards recognised by the appropriate chemical test (a per-salt of iron) which brought out prussian blue.

In other instances, again, I have witnessed the most extraordinary self-deception: which, as in the mesmeric performances, invested occurrences which could be readily accounted for on 'natural' principles, with a 'supernatural' character; often through the omission of some essential fact, which is entirely ignored by the narrator. Thus I was seriously informed, during the Tableturning epidemic, that a table had been moved round by the will of a gentleman sitting at a distance from it; but it came out upon cross-examination that a number of hands were laid upon it in the

tion, and completely ignoring all facts which tell against [my] theory,' I have only to say that the reader of these lectures will see that my whole aim is to discover, on the generally admitted principles of testimony, what sre facts; and that I have no other 'theory' to support, than that of the constancy of the well-ascertained Laws of Nature.

usual way, and that after the performers had sat for some time in silent expectation, the operator called upon the spirit of 'Samson' to move the table, which then obediently went round. Sometimes the essential fact, under the influence of this proclivity, completely passes out of the mind of the narrator; as in the instance of a lady, cited by Miss Cobbe in her paper on the Fallacies of Memory, who assured Miss C. that a table in her drawing-room had some years before correctly rapped-out her age in the presence of several persons, none of whom were near the table; the fact being impressed on her mind by her annoyance at the disclosure, which was so great that she sold the table! Having assured Miss Cobbe that she could verify the statement by reference to notes made at the time, she subsequently corrected it, very honestly, by telling Miss C. that she found that there were hands on the table. So, I have been recently requested by a gentleman to go and see a light table made heavy at the will of a person standing apart from it; a table which could be ordinarily lifted on a single finger, requiring the strength of the hands to raise it when so commanded. Thinking that this might be a trick of the kind that Houdin played upon the Arabs by means of an electro-magnet, I made some preliminary inquiries with a view to satisfy myself whether the phenomenon was to be thus accounted for; and finding that it was not, I was about to go to witness it, when I received a letter from the brother of my correspondent, who told me that he thought I ought to know the real conditions of the performance; which were that the hands of two of the operator's family being first laid upon the table, the table was upset and lay on the floor on its side; and that then, their hands still pressing sideways upon the top of the table, it could be made light or heavy by the will of the operator at a distance, a single finger being able to raise it up in the one case, while the whole hand was required in the other. And thus, as in the case of 'the spirit of Samson,' it became evident that the will of the operator was exercised in regulating the pressure of the hands in contact with the table, there being no evidence whatever of any alteration in its actual weight.

I have thus endeavored to set before you what a long sequence of experiences seems to me to teach in regard to this subject; namely, that we should trust rather to the evidence of our sense than to that of our senses. That the latter is liable to many fallacies, we are almost daily finding out. If we go to see the performances of a conjuror, we see things which we know to be impossibilities; and that knowledge makes us aware that they cannot really happen as they seem to happen. Thus every conjuror can pour out scores of glasses of different kinds of wine from a single bottle; or can tumble a great pile of bouquets out of a single hat; but we know that he must do this from some larger store, which he dexterously conceals from our view. So the celebrated conjuror, Bosco, seemed even to those who were closely watching him within a very short distance, to convert a living hare into two living rabbits; the movements by which he made the exchange from a bag behind him, being so extraordinarily rapid as to elude the observation of the bystanders, whose attention he fixed (the great secret alike of conjurors and professional 'mediums') upon something else. And I conclude therefore, as I began, with the affirmation that we have a right to reject the testimony of the most truthful and honest witnesses, as to asserted phenomena which are as much opposed to the 'Laws of Nature' as the transport of a human being through the air, or the conversion of a hare into two rabbits; until the facts of the case shall have been so thoroughly sifted by the investigation of 'sceptical experts,' as to present an irresistible claim on our belief. In every case within my knowledge in which such investigation has been made, its fallacies have become apparent; and when, therefore, I receive narratives from persons quite credible as to ordinary matters, as to extraordinary occurrences which have taken place within their knowledge, I think myself justified in telling them plainly that their conviction cannot govern my belief, because both theory and experience have led me to the conclusion that no amount of testimony is good for anything which is given by persons 'possessed' with a 'dominant idea' in regard to the subject of it.

As I wrote twenty-three years ago-

In all ages the possession of men's minds by dominant ideas has been most complete when these ideas have been religious [aberrations. The origin of such aberrations has uniformly lain in the preference given to the feelings over the judgment, in the inordinate indulgence of emotional excitement, without adequate control on the part of the rational will. Those who are thus affected place themselves beyond the pale of any appeals to their reasoning faculty, and lead others into the same position. They are no more to be argued with than are insane patients. They cannot accept any proposition which they fancy to be in the least inconsistent with their prepossessions; and the evidence of their own

feelings is to them the highest attainable truth.*

Many of the victims of these delusions have become the subjects of actual Insanity; which has been attributed by believers to 'a spirit having entered in and taken possession.' What kind of 'spirits' they are which thus take possession of credulous and excitable minds, I hope that I have now made sufficiently plain:—they are Dominant Ideas.—Fraser's Magazine.

* Quarterly Review, October 1853.

CONSTANTINOPLE: A SKETCH DURING THE CONFERENCE.

THE artist and lover of the picturesque, in which sense only I can speak, must find pleasure, even in winter, on the shores of the Bosphorus, and so much the more so naturally when as now they form the stage on which a great historical drama is in course of action. The first and tragic part has not long been over, the second was last Christmas about to begin; while for the third the curtain may rise at any moment. In truth I cannot say that the raptures of Anastasius-immortalised though they are by a place in the Vade Mecum of the British tourist-appear to me fully justified; but, then, he was an adventurer and a subject of Turkey, no less than a clever Greekling. To his eyes the chief city of the Empire would naturally swell in proportion to his own self-conceit: for the greater the subject the greater must be the glory of the ruler: while to his mind, the domes of Stamboul might well glitter with gold, and the waters of the Strait run in a silver tide, when he hoped to find even the streets of Galata paved with those precious metals.

Most people approach Constantinople from the Dardanelles and the Sea of Marmora; partly from a natural wish to steam through the romantic channels of the Isles of Greece, partly because they imagine that the road which does not overshoot its mark must be the shortest; but if they would be content to make for the Black Sea at Varna and then come back again, they would in fact reach their goal in little more than half the time; and would find, moreover, that what they had lost in romance they had

gained in comfort by avoiding some eight-and-forty hours of capricious sea; which, all isle-bespangled as it is, is apt to have in December or January some disturbing effects. The arrival from the east is greatly more imposing than that from the west, and has all the advantage, to use a commonplace illustration. that has the gradual approach by a handsome lodge and noble avenue to some country mansion, over the sudden turning into its courtyard from the public highway. Tall mountains rise as sentries on either side of the first opening to the Bosphorus, and others behind them force the blue waters of the Strait to make a series of bold curves which form in appearance as many land-locked lakes. In the largest of these, at Buyukderé, lies at anchor the Turkish ironclad fleet round the Massoudieh, the grandlooking flag-ship of Admiral Hobart Pacha. Even before reaching that bay a few hamlets have caught the sunbeams on their yellow walls and red-tiled roofs, while from each at least one minaret has shot up its slender white spire against the mountain-side. But from Buyukderé some ten miles onward to the city there is a continual succession of buildings, either palaces on the water's edge with wide slopes of garden behind them, or villages clustering in every nook of the steep shores both of Europe and Asia. At this season the hills are brown and bare, but in the gardens many cypresses and stone pines give the requisite warmth of color. No doubt the palaces are nearly all more or less Frenchified, but the smaller houses are still mostly of

wood painted yellow or brown, with bay windows, bright roofs, and broad overhanging eaves; not unlike the cottages of Switzerland, if the constant neighborhood of a minaret did not banish any but Oriental comparisons. So much has been written about Turkey during the last few months that the Bosphorus is nearly as familiar as the Thames, and I will not repeat an old story further than seems necessary to paint broadly this most striking spectacle of a vast street of water sweeping on for miles with many a graceful bend through an almost unbroken suburb. It is true that half the great houses are duplicates. Your Turkish magnate likes elbow-room, and, from the Sultan downwards, possesses as many palaces as he can by any means contrive to buy or build. The European residents follow suit, when rich enough; and the result is that an inquisitive stranger who comes, as the writer came, on board the Varna boat, fancies himself back among old nursery friends, and in the land of that ubiquitous Marquis of Carabas. But when every allowance is made for this repetition of ownership, a startling residuum of population and of wealth is still left. No wonder that the crowd of provincial Turks, who had made their beds on deck, rolled up their mattresses; and with their many-colored garments somewhat saddened by the discomfort of a voyage, collected as soon as the morning broke into groups to watch the scene with curiosity and pride. For its beauty called on deck also a highlycultivated Pacha, who was received with much respect on coming on board the night before. The attention to him would, no doubt, have been doubled, had it been foreseen that three months would make him first subject of the Empire; and the unconcealed exultation of that courteous gentleman with the close gray beard and quick glance through his double gold eyeglass, who spoke French so perfectly, must, now that he is Grand Vizier, be taken as a factor in politics. He pointed out the apparent signs of wealth and prosperity with the evidentlyimplied question trembling on his lips, "Is this the look of a man sick beyond recovery?" With Edhem Pacha as a statesman I have nothing however now to do, and merely take an artist's liberty

to paint him in the foreground of my picture, as I chanced to find him.

When praising the Bosphorus so highly it may seem a contradiction to say that on the whole Constantinople, even from the outside, does not come up to expectation. The size of town and faubourgs is enormous, greatly larger than their reputation, and by approaching from the east one gets the full effect of this; but the hills of Stamboul itself are sadly wanting in height: after the steep and mountainous shore of the Strait it is a disappointment to see the long, low, mere swell of land on which the main city rises, and of which the outline, if not helped by numerous domes and minarets, would be very tame indeed. Then the Seraglio Point is too much broken up by unconnected lines of building and straggling rows of trees to form a wellmarked group; while the far-famed Golden Horn is disappointingly smaller than it ought to be. On the other hand, the crowd of shipping, boats, and people is marvellous.

Perhaps this crowd is, altogether, the most striking feature of the place both on land and sea. Of course the traffic is really nothing compared with London or Paris, but yet both these capitals seem empty after that of Turkey. About half-past ten or eleven in the morning on Monday, which is about the busiest hour of the busiest day, the long line of the Grande Rue de Pera and the chief streets below it, all round from Tophané to the arsenal at Kassim Pacha, seem to a stranger as crowded as streets can be. until he has to fight his way through the shoulder-to-shoulder mass of speculators in front of the Bourse at Galata, and the porters, money-changers, fish and fruitsellers between that and the bridge leading to Stamboul. Upon this bridge there is just room to thread your way, and not more; while in all but the back streets of Stamboul-although it is a huge town with numerous great open spaces-there is scarcely walking or even standing space. So much for people, but to them must be added carriages not a few, horses and mules innumerable, and pretty frequent bullock carts. On one side of the way a train of recruits is landing from the Scutari boat, a troop of excursionists from the Prince's Islands

Greek and Levantine merchants coming to business from their lovely homes at Candilli or Ortakeui. The recruits are tattered and travelworn; some of them have evidently marched from the far interior of Asia Minor to reach the rendezyous; and all look as if the most meagre fare, both as to quantity and quality, had been the best they could obtain. They shuffle off in uneven file towards Galata; but it is surprising how contented and uring Yashmak and Feringhee. A short alert they will appear, when they return a few hours hence equipped and armed as soldiers, and on their way to barracks in Stamboul. From the opposite side of the bridge start the smaller steamers which ply to Eyoub at the head of the Golden Horn. The sea is everywhere of great depth, and men-cf-war or great passenger vessels lie all about the harbor, while smaller merchant ships are ranged in endless rows along the shore; every vacant space of water is dotted over with the pretty fanciful caiques; while as background to the whole the houses are piled together as closely as tion between the two halves of a great the inhabitants. On the hill of Galata they rise thickly-each one on, seemingly, the roof of that below it, scarce leaving room for the gray mass of the old round Genoese tower, which marks the point; while Stamboul, which has from the distance almost a level outline, is found on closer view to be broken up into numerous valleys and heights, on which houses and mosques jostle each other in the most singular confusion. If the throng of people were all dressed alike it would be less striking; if it were talkative, like that of Naples, it would be far more bewildering, for the languages here are almost as various as are the costumes. The fez is sufficiently general to give a red flush to the sea of heads, but that is the only prevalent The European coat and trousers are common enough on the Pera side, but in Stamboul they make their wearer remarkable among the brown-braided jackets and pantaloons of the hamals; the long robes and white or green turbans of the old Turks, of the Ulemas, and of the large and restless class of the Softas; the scarlet-jacketed Croats, or much-em-

in the Sea of Marmora, or a party of rusty silver-mounted weapons in their girdles; the great fur bonnets and coarse leathern tunics, with a double row of cartridges sown on either breast of the Circassians: the flowing gaberdines of the Jews; and the wild garment of skins of the gipsies. Women are plenty enough, but the walkers are merely blots of color without feature or outline in their shapeless wrappers of some brilliant silk, and with their heads bound up in the disfigexperience teaches one the different types of face among the men; they are as various as their garments, and as each race usually lodges apart, it is easy to study any particular type by visiting any one quarter of the town. The pure Turk of the lower orders himself is frequently handsome and well made, and has usually, too, a contented pleasing countenance; but there is another and most disagreeable type of Turkish face, not quite uncommon, and which bears a look not less cruel than cunning.

Of all main channels of communicacapital, the worst I have seen is that crazy bridge of boats connected by uneven planking, which contrives, as by a miracle, to support the monstrous stream of traffic across the Golden Horn. There is certainly another and better bridge near the arsenal at Tershané, but that has been ingeniously contrived so as to start from a point at which few people arrive, and to lead where not one wants to go. Thus happily situated it is in good repair, but desolate: while the other is as populous as it is ruinous. Had Turkey the same care that other nations have to put the best foot foremost, she would avoid giving shocks to each stranger at the outset. She would repave the streets of Constantinople and would replace the tottering structure spoken of by something more solid than the iron wreck alongside it. That was soon after its arrival and before completion run into by a man of war, and has since remained for now many months in melancholy evidence of the strength of a Turkish ironclad and the emptiness of the Ottoman exchequer. The arsenal dark graceful pelisses of the dignified and dockyard are higher up the Horn, and high-bred-looking Persians; the so that a large part of any bridge must be movable: but constructive engineers broidered Albanians, with an armory of are not wanting in the world; while the toll of many thousand daily passengers ought, if properly managed, soon to pay the cost. Even by an artist the fine dome and beautiful minarets, with their triple galleries, of the Sultana Validé Mosque just beyond, would be more appreciated if they could be approached at less danger to neck and ankles.

A charming picture is this Validé from every point of view. Around the front, facing the end of the bridge, collected every morning a crowd of costermongers (as we should call them in England), who plied a busy trade at the foot of and upon the high flight of marble steps which lead to the recessed and shrouded entrance, while intending worshippers purified themselves at the long succession of small fountains, which are never absent from the façade of a mosque. On another front is a courtyard, and within it I often found groups of peasants or of Tchinganees encamped under a noble arcade lined with Persian tilework, and resting its particolored arches upon granite and porphyry pillars. To reach the back a quaint, oblique gateway must be passed, leading beneath the covered staircase and corridor which provide a private entrance for the Commander of the Faithful, and issuing out upon a considerable space surrounded by the various buildings of the priestly quarters, and full from dawn to sunset of an animated fair. A hundred kinds of sweetmeat or fruit are displayed on a hundred little tables, while a line of moustached and turbaned shoeblacks squat under the wall of a small inclosed cemetery and earn a handsome income by their hopeless battle with the mud of Stamboul.

A crack from the long lash of a mounted negro's whip warns you perhaps to jump aside, and stand a little removed from the throng, where the moneychangers display piles of medjidiés (a silver coin not unlike, in size or value, our old crown piece), béshiliques (between a shilling and a franc), and bundles of caimé and mounds of copper in their little glass-covered tables, while spectacled scribes are ready with pen and ink-horn to register a bargain or in-dite a love-letter. This impatient cavalier, with braided uniform, high jackhis belt, and a truculent sabre clattering bastard Franco Moorish style which he

by his side, turns out to be the cavass of an ambassadress on her way to the Great Bazaar, so you may avail yourself of the channel made in the crowd to avoid that grave and handsome Persian, who might for dignity be the Shah himself, but is only a small merchant anxious to sell the rug he carries gracefully draped over one shoulder, and pick your way up the crooked climbing street of Mahmoud Pacha, Alas! the Great Bazaar dispels another illusion! and is not the scene of mysterious and seductive splendors that fancy and the Arabian Nights have painted it! It is nothing but a most extensive labyrinth of vaulted not lofty passages, very badly lit from round windows in the roof and lined with miserable little shops. No doubt every conceivable article is to be found there, from the revolver of the newest American fashion, the cretonne chintz of the latest pattern, or the most gaudy piece of Manchester cotton stuff to the scimitar of Saladin, the prayer-carpet of Eyoub, or the richly-embroidered towel on which Suleiman the Magnificent condescended to dry his hands: but the incessant pursuit of Jew commissionaires and the solicitations of Greek or Armenian merchants are so bewildering that escape at the other end is welcome through the loftier arcade of the old Bezestein.

The finest situation in Stamboul is occupied by the Seraskierat, or war office, and it is worth scaling the winding stair to the summit of the tower here in order to study the panorama of the far-stretching masses of building. On one side they run for three or four miles along the Sea of Marmora, while on others they surround the Golden Horn, and line both sides of the Bosphorus as far as the eye can reach. Close under you is the Pigeon Mosque of which the picturesque courtyard is almost filled by the enormous flock of those birds which have resulted from Sultan Bajazet's care, and are maintained under a special provision of his will. This mosque occupies one side of a large irregular square, and this square, on the day when I first saw it, was so encumbered with numerous flocks of sheep, and would-be buyers, that a calvacade had much difficulty in making its way up to the great gate of the Seraboots and mighty spurs, with pistols in skierat, which Abdul Aziz built in that seems to have established as the national architecture of Turkey. Through the crowd at last it came, and the soldiers who accompanied the carriage would have proclaimed his dignity, even if I had not recognised the face of Midhat Pacha, then only Grand Vizier of a few days old. Midhat's following was of course larger than that'of any other minister, but all the great Pachas have a certain retinue, and to accommodate these retainers the ground floor of the Konaks, or large town houses, consists of a covered court with a wide staircase at one end leading up to the dwelling-rooms above. These are arranged and furnished much as in France, except that there are more divans and fewer tables. Great dinners, too, are apt to be disappointingly like a Western banquet; at one oddly enough the chief novelty was a pretty little girl who peeped round the dining-room door, and mixed shyly with the guests afterwards; while one alone of a dozen Ottoman gentlemen, sat with foot tucked under him on his armchair, and smoked the bubbling narghileh of tradition. Mahmoud Damat Pacha is in the prime of life, portly and handsome, but has not cared to acquire either the postures or the language of any Frankish nation.

The Turkish Passover, called the Courban Bairam, or Feast of Sacrifice, had called together the flocks of sheep, but they were soon dispersed, most of them to make one last uncomfortable journey, each on the back of his purchaser. Nothing was more quaint to see than the unlucky animals with their forelegs held firmly one over each shoulder of the bearer, so that their poor patient heads nodded gravely above the red fez or green turban. Every true believer ought properly himself to buy and conduct home the sheep, which must be killed that night by his own hand for the atonement of the household. At sunset cannon announced that the festival had begun, and as the twilight faded into darkness it was very pretty to watch, gleam brightly one after another, the lights which had been hung out from the gallery of every minaret, from the public buildings, and from the men-of-war all about the harbor. To a Christian of grand ceremony early the following ed from the public eye as was the prophet

morning in St. Sophia; but when the original consecration of the edifice can be forgotten the spectacle of these great Mohammedan festivals is little less imposing than the services of Holy Week at Rome. The Sultan and all his ministers in full uniform; the Scheik-ul-Islam and a vast train of priests in splendid robes are there with a countless throng of meaner people, to fill in long kneeling rows the spacious floor with masses of brilliant color, while the sunbeams find entrance through the numerous though small windows of the great dome, and die away in warm masses of golden shadow, which reflect the tone of the paint or fresco with which the entire interior is covered. The exterior of St. Sophia is as ugly as its interior is imposing; and the purely Turkish mosque of Sultan Suleiman is scarcely inferior to it within, while it is incomparably more graceful and effective without. That too is in good repair, being the only not. new building in Constantinople that is so. At first one thinks that there must have been a time when the Ottomans were great architects, and when the whole town was in harmony with the many fine mosques, the numerous and beautiful fountains, or rather kiosks for water, and the massive stone-built khans one sees on every side. Longer acquaintance, however, with the disjointed effort at architectural effect, which characterizes even the most modern streets of the city makes one doubt if any portion has at any time formed a harmonious whole. In point of style, the 'old buildings greatly excel the new.

In this city of contrasts civilisation and barbarism go hand in hand, and a line of tramway-cars, which have a special compartment to shield veiled women from the profaning eye of man, carries a quantity of passengers during the day at Stamboul through streets that are lit at night by only the paper lanterns of the few-and-far-between passers-by. strange, as at one of the brilliant balls at the Austrian palace, to dance to the exquisitely civilised music of Vienna, while an Egyptian Princess holds mysterious court-to which of course only ladies are admitted—behind the gauze curtains of a gallery above. She can see the gay course there was some profanation in the scene below, but she is as closely shroudare very few, and the best street is so narrow, that two carriages can hardly pass-and so badly paved, that a sedanchair is the only comfortable conveyance. In this street, however, are all the Embassy palaces, except that of England; and upon its execrable pavement were to be met, so full was Constantinople of notabilities, some three or four in an ordinary stroil. You could scarcely miss, and would not fail to notice, in particular, one sturdy martial man with a resolute, restless face, and ever-watchful eye. General Ignatieff and his sufficiently numerous colleagues had each his little court of secretaries and compatriots. There are also one or two wealthy residents, but Turkish aristocracy in any European sense there is none whatever, and can be none under the Mohammedan view of domestic life. Then it requires to be an Oriental to understand the charms of kief, or the art of doing absolutely nothing; and an ordinary man misses terribly the galleries, the libraries, the theatres, and other advantages which are to be obtained to some extent even in the most moderate Western capital.

Æsthetically it is perhaps agreeable to tame, pre-eminence they have gained millan's Magazine.

of Khorassan. Nor is the assembly ren- elsewhere. It is certainly pleasant to dered more commonplace by the splen- find that one of the prettiest relics of the did blue and silver uniforms of the Hun- fanciful stateliness of the land of Aladgarian Count Zichy's private hussars. din is also, from a practical point, a de-At Pera a subterranean railway saves a cided success. No more fairy-like scene weary climb up hill, but the gas lamps can be imagined than the state procession by water on a fine morning, of the Sultan to the Selamlik, or Friday-Prayers, at some mosque of his choosing. No more fanciful bark can be conjured up by the imagination than the painted and gilded galley which bears the Khalif under a canopy of crimson velvet, looped back with golden cords. But this relic of Haroun-al-Raschid can yet beat the latest effort of modern boat construction, and can and does, with nothing but its six-and-twenty silk-clad rowers, leave a steam-launch going at full speed far behind even in the first hundred yards. Followed by six or seven scarcely less gorgeous barks with the sun gleaming on the eagle at the prow, on the crescents which crown each pinnacle of the canopy, and on the green and gold robes of the Albanian at the helm, the state caique glides over the water as majestically as it does rapidly; while the numerous war-ships of every nation round dress their masts with flags and man their yards. Abdul Hamid has a slight figure, but a shrewd as well as commanding expression, in spite of the look of ill-health and nervousness on his pale, somewhat Armenian face, with its long features and close black beard, and he seems to wonder, as find that a great city still exists where he bows courteously, whether the cannon sound sense and economical science are fired by his own subjects, or the honor not likely to have for some years to come paid him by his powerful neighbors, bethe same highly laudable, but somewhat token the most lasting respect.—Mac-

PROPOSED RESUMPTION OF THE VATICAN COUNCIL.

A TELEGRAM from Rome has been going the round of the daily papers, which has not, so far as we are aware, been contradicted, though neither has it been confirmed, while on the other hand it has formed the subject of comment in various quarters. Yet it is not easy to believe that the Pope has seriously contemplated reassembling the Vatican Council, though it is abundantly intelligible that the Cardinals, to whom His Holiness is said to have referred the suffered so many things at his hands al-

question, should have replied that such a step would be inopportune. Pius IX. indeed, to do him justice, has never lacked the courage of his opinions, and if he deemed it for his interest, which is identified in his own mind with the interests of the Church, that the suspended Council should resume its sittings, no considerations of mundane policy-still less any reclamations on the part of the much-enduring episcopate who have

ready-would be likely to restrain him from acting in the matter. But the one chief reason for distrusting the accuracy of the report is that, so far as fallible human judgment may presume to meddle with such high matters, it would very clearly be not at all for the interests which Pius IX. has at heart that the Council should meet again. Whether its meeting originally was for the benefit of the Roman Catholic Church is a question which has been asked, and somewhat trenchantly answered, by many of her most distinguished divines during the seven years that have elapsed since the too famous Vatican decrees were passed. Into that inquiry however we need not enter here. From the Ultramontane point of view, which is that of Pius IX. and the Curia, the Council has on the whole proved a success. It was summoned for a very special and definite purpose, and that purpose was eventually achieved. We do not of course forget that of the many grave subjects previously announced as under preparation in the various preliminary Committees very few were ever brought into debate at all. But there was one point which found no place in the official programme, and was yet declared from the first by writers like "Janus" who knew something of what was going on behind the scenes to be the supreme, if not the sole, motive of the anxiety of the dominant party at Rome to invoke that very resource of a General Council which the traditional jealousy of Rome has taught her most studiously to evade. They were denounced, vilified, and ridiculed by the organs of the Curia, but the event proved they were right. The Council was convoked to proclaim the infallibility of the Pope, and was prorogued the moment it had done so. But inasmuch as the darling scheme of the Jesuit Camarilla who ruled the Court was strenuously resisted overwhelmingly preponderant in moral and intellectual force, the business which was meant to have been settled in three weeks-as the Civiltà Cattolica had imprudently hinted-had to be prolonged over eight months. And meanwhile several Schemata were proposed, changed, and withdrawn, to occupy the time and divert attention from the real question at issue. The Curia triumphed at last,

as under the circumstances was inevitable, and the Jesuit conductors of the Civiltà, as "Pomponio Leto" has informed us, offered their solemn acknowledgments to Archbishop Manning for his conspicuous services in the attainment of the result. So far therefore as the immediate object of the Council was concerned, the end was gained, though not without some trouble, and the entry of the Italian troops into Rome a few weeks afterwards supplied an excellent excuse for not resuming the interrupted sittings after the summer was over. There can be no doubt that "the intruding Government" would not have offered. as it had in fact no reason or right to offer, any opposition to the continuance of the Synod, and, if we remember rightly, express assurances to this effect were given. But the Court of Rome had no wish for its continuance, least of all under the altered political conditions of the case, and there can be no doubt that it judged wisely, for more reasons than one. As the force of those reasons is rather increased than abated since, it may be worth while briefly to indicate why the Pope and his advisers did not think fit to reopen the Synod then, and are still less likely to desire it now.

The infallibilist dogma was carried, not without vigorous and very damaging opposition, and has been received throughout the Roman pale, not without murmurs in some quarters and open protest in others, but on the whole with a kind of sullen, half-contemptuous acquiescence. This was the utmost that the innovating party could expect, and even this measure of external success is partly due to a combination of favorable accidents which could not have been foreseen. Among these favoring circumstances must be reckoned first the occupation of Rome, which could not fail, for the moment at least, to elicit or strengthby an opposition numerically weak but en a chivalrous sentiment of loyalty to the spiritual claims of the pontiff whose temporal grandeur had suffered so rude a shock. That feeling was further intensified by the Franco-Prussian war, ending in the humiliation of "the eldest daughter of the Church" by a Protestant Power, and at once breaking the neck of the French opposition to Vaticanism, which had fought under German leadership, by enlisting all the ardor of patri-

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otic sentiment against everything German. Meanwhile the great standard-bearer of the French opposition, who towered morally and intellectually above his fellows, Mgr. Darboy, had been swept away by the Commune, to the hardly concealed satisfaction of Rome which breathed more freely when he was removed. But the impetus and main strength of the opposing forces had been derived from Germany, where almost the entire episcopate had committed itself beforehand to a rejection of the new dogma and had gone to Rome pledged to resist it to the last. With one or two exceptions they beat a speedy and ignominious retreat on their return from the Council, and one of them, who was both publicly and personally committed to agreement with Döllinger against the dogma, excommunicated him for refusing to accept it. That they lost caste among their countrymen, Catholic as well as Protestant, was a necessary sequel of such conduct. But here help came to the Vatican from a most unexpected quarter. It pleased Prince Bismarckwhether, as he himself alleged, in consequence of the Council, or not-to undertake a crusade against the Roman Catholic bishops and clergy, which to the vast body of their co-religionists all the world over, and to many others also, had all the look of downright persecution. They were challenged, not for submitting to the Vatican dogma, but for maintaining what they had always been accustomed to regard, before just as well as after the Council, as the inalienable rights and liberties of their Church. Only one course was open to them as ecclesiastics or as men of honor-to resist and take the consequences. Some half-dozen bishops have accordingly been fined, imprisoned, or deprived; and several hundred - we believe over a thousand priests have incurred similar penalties. Whether the policy embodied in the Falk laws was or was not a wise and just policy in itself is not the point. If we assume for argument's sake that it has all the justification which its promoters claim for it, the fact remains equally certain that no greater service could well have been rendered to the cause of Vaticanism than this opportune rehabilitation of the German Bishops. The bitterness of the antagonism provoked by the Falk

legislation may be measured by the startling news recently given in the German papers, that an alliance offensive and defensive is being formed between the Catholics and the Democratic Socialists, who can have hardly a single idea in common beyond hostility to the existing State.

Here then are some of the circumstances which have conspired to bring about so wide a passive acquiescence in the Vatican dogma. But even so it would hardly have escaped keener criticism, had not submission or indifference been secured by the latitude of interpretation virtually tolerated. From the rigid and consistent ultramontanism of the Dublin Review, which invests all the eighty propositions of the Syllabus and a host of earlier Papal decrees on all sorts of subjects with the sanction of infallible authority, to the very different reading of the decree enounced in Dr. Newman's Letter-not to speak of still laxer interpretations professed without censure in less influential quarters—there is a very long interval indeed. And Dr. Newman, as well as others, has suggested for the relief of troubled consciences that, although the obnoxious dogma cannot be rescinded, it may be "explained"; and explanation is a very elastic term. The Pope declared on some public occasion that he would not explain it himself, and he showed his discretion by saying so; omne ignotum pro mirifico, or, if we may be allowed to coin a word for the occasion, pro mystifico, and the mystery is very useful in so perplexing a matter. But if the Council reassembled now, these advantages, and especially the last, might be entirely or partially lost. All the old disputes and heart-burnings would revive, and attention would once more be directed to the bishops in their conciliar capacity, so to speak, and not in their diocesan attitude at home towards their own or neighboring Governments. Above all it would be about equally difficult to explain the decree or to leave it unexplained. The latter course would give a tacit sanction to the great variety of differing and almost contradictory senses in which it is now accepted as falling within the range of legitimate speculation. To explain would mean either to give an express, instead of a tacit, sanction to this laxity of interpretation, or to invite fresh opposition and possibly risk another schism by tightening the bond. We may be sure that Pius IX. would never consent to the first plan, and there is probably enough of the wisdom of the serpent in his trusted advisers, if not in himself-and he does not lack shrewdness-to preclude the second. There is another objection of a more vulgar and prosaic but very practical kind to the reassembling of the Council in the present state of Rome. Readers of the *Letters of Quirinus* will not require to be reminded how very efficient a part the Papal police played in the subjugation of the recalcitrant minority. Thus, to take but a few examples which could easily be multiplied, no member of the opposition was allowed to publish a line in Rome, and what was printed on that side elsewhere could only be smuggled into the holy city by some ingenious evasion of the established regulations. The Giornale di Roma plainly reminded the Bishops that they were liable to arrest, and could not leave Rome without permission. The whole impression of a work ascribed to Ketteler was seized at the Post Office; some prelates were threatened with imprisonment; and an Armenian Archbishop with his secretary and interpreter was actually incarcerated for a time by the Inquisition, in spite of his appeal to the protection of the Turkish ambassador. It is obvious that with the loss of the temporal power this means of controlling the action of the Council is at an end. The instrument which in Papal Rome required a good deal of manipulation might prove more unruly in the freer atmosphere of the capital of Italy.

Other reasons might be added, but enough has perhaps been said to show the extreme improbability of the rumor that the Pope has in contemplation the

the Synod has been adjourned and not dissolved is no doubt a remarkable fact; and to prelates who, like the late Cardinal Vitelleschi, regard the decrees of 1870 with alarm and disgust and look anxiously for future explanations of what cannot decorously be repealed, it will naturally seem to offer a providential opportunity of escape from a serious dilemma, whenever the time for taking advantage of it shall arrive. But they will be the first to acknowledge that no such opportunity can occur during the life of the present pontiff. All speculation about the person or policy of the successor of Pius IX. is not only premature but pure guess-work. There are no adequate data to form the basis of even plausible conjecture, and it is worse than idle to waste time in twisting ropes of sand. What may pretty safely be assumed is that a Council which has been dragooned into committing moral felo de se, by abdicating in favor of the Papacy what were supposed to be the exclusive and inalienable prerogatives of such bodies, will not be galvanized into a second and shadowy existence for no intelligible object and at risk of serious inconvenience, by the very authorities who extorted from it this confession of its own inherent futility. Indeed a later telegram only two days ago reports that, in consequence of the declaration of the Sacred College that it is not opportune for the Council to resume its labors, "the Pope has distributed for study the questions left undecided, with a view to determine if by his proper authority he can solve them.' But that point has been already "determined" by the Vatican decree, and Pius IX. is the last person living likely to forget it. Whatever questions may have been left unsolved, it is obvious that the "proper" and the only proper authority for solving them rests with the infallible reopening of the Vatican Council. That pontiff.—Saturday Review.

HOW WE COME BY OUR KNOWLEDGE.

BY PROF. G. CROOM ROBERTSON.

thought to have passed into a new phase in recent years. Nobody nowadays seri-ously maintains the sensationalist posi-NEW SERIES .- VOL. XXV., No. 5

THE old question of the relation of tion of the eighteenth century. Even Knowledge and Experience is generally those who attach most value to Locke's way of thinking are ready to scout the notion of tabula rasa, and to allow that the old supporters of innate ideas, native intuitions or whatever else they were called, had a real insight into the nature of knowledge as manifested by every human mind. There is an element or factor in the individual's knowledge that is there before or, at all events, apart from that which happens to come to him by way of ordinary experience.

This other element or factor is now most commonly represented as an inheritance that each human being brings into life with him. The inheritance can perhaps be most definitely conceived in terms of the nervous organisation which, it is practically certain, is involved in all mental goings-on, but it must admit of expression in terms of consciousness also. We are to understand that a human child being what he is-the offspring of particular parents, of a particular nation, of a particular race, born at a particular stage in the race's development-does know and feel and will otherwise than he would if all or any of these circumstances were different. Nor does this apply only to the general laws and limits of his knowing, feeling and willing: it must apply also to his simplest conscious experience of any sort. An artist's sense of color or sound will be something different from a costermonger's, and not merely because of a difference in the experience they have had and stored up. Their sensible experience will have been of intrinsically different quality from the beginning; and the principle of heredity must contain the explanation of such differences, if it does explain the general uniformities to which intelligence appears to be subject in all minds alike.

Confining attention, however, on the present occasion, with philosophers in general, to the uniformities of knowledge -such, for example, as the reference we all make of sensible qualities to a substance or underlying thing in which they inhere, or the conviction we have that every event has been caused-I cannot for my own part doubt that human beings are determined by inherited constitutions (mental or nervous, or mental and nervous) to interpret and order their incidental experience in a certain common fashion. In the absence of a definite mental constitution, which must be inherited because the corresponding nervous organism is inherited, there is, I

think, no way of conceiving how human beings come by the knowledge that we seem all to have in normal circumstances; us, accordingly, when the inheritance is plainly abnormal,—for instance, in idiots—the mode or amount of knowledge is clearly different from what it is in other men. At the same time it does not seem possible upon this line to get beyond a general conviction that the way of men's knowing is prescribed for them by ancestral conditions. Or, if the attempt is made to determine the details of our intellectual heritage, it seems impossible to stop and not fall into the notion that original endowment is everything, and a man's life-experience little or nothing, towards the sum of his knowledge. The latest phase of modern philosophic thought, then, becomes hardly distinguishable from the high speculative doctrine of Leibniz-that in knowledge there is, properly speaking, no acquisition at all, but every mind (or monad) simply developes into activity all the potency within it, not really affected by or affecting any other mind or thing. The notion is of course suicidal; for how can there be, on the whole, a progressive evolution of all, except there be action and reaction among individuals, as the condition of working up to higher and higher stages of being? Nevertheless, it is no exaggeration to say that the tendency of recent evolutionism in psychology is to reduce to a minimum, or even crush out, the influence of incidental experience as a factor in the development of the individual's knowledge. What can happen to the individual in his little life seems to be so mere a trifle by the side of all that has before happened for him through the ages!

Once recognise a more or less constant à priori element in knowledge as coming by way of inheritance, and what is then wanted for the explanation in detail of the uniformity that appears in the knowledge of different men is an adequate conception of the actual life-experience of individuals. It is truly surprising how meagre and artificial—artificial in the sense of coming short of the fulness of natural fact—the conception current among philosophers has been. Sensationalists in particular were concerned to take no narrow view of the case. In point of fact, they so read

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their famous formula about Sense and for the guidance of muscular acts; but Intellect as to throw away a cause that they would not be the rational educable in itself was far from weak. The notion was that children coming into the world had everything to do and find out for themselves. The world was there, and the little creatures, all naked without and their minds like a sheet of white paper within, were thrown down before it, at once to struggle for bodily existence and to take on mentally what impress they might from surrounding things. If they managed to survive, as somehow they generally did, they were found after a time in possession of a certain amount of knowledge about the world and themselves; and (most remarkable!) this knowledge, though it might be limited, as of course children's knowledge must be expected to be, was yet so definite in each and uniform in all, that it had only to be expressed by a system of signs (which, after long doing without them, men had somehow agreed to use), and the children were turned into sociable creatures with whom it was possible tohold rational converse. Now it is not to be denied that, in working out their theory, the Sensationalists were the first to determine with some exactness the elements of sensible experience involved in many of our most important cognitions, and also those intellectual laws of association under which these elements are ordered or fused (as the case may be). But it cannot be allowed that they gave anything like an adequate analysis of knowledge generally, or, in particular, rendered a likely account of the way in which the swarm of jostling sensations and other strictly subjective experiences settled down and were transformed into the coherent and orderly mental representation of boys and girls beginning to communicate with one another and with their parents and friends. The least consideration, indeed, neight have revealed the error of the point of view. Children are as little left to work out their knowledge for themselves as to nurture their bodies. If they were left to struggle alone against the world for bodily life, they would assuredly perish. If they were left to find out everything in the way of knowledge by themselves, they might (always supposing their bodily life sustained for the first year or two) come to combine sensible impressions

creatures that even mudlarks, living the social life, are at the age of three.

'The social life '-in these words is indicated the grand condition of intellectual development which the older psychologists are far more to be condemned for overlooking, than they can be blamed for not anticipating the notion of heredity that has grown out of the biology of the present century. In the last century, other sciences had not advanced far enough to make scientific biology possible; and psychology, in as far as it depends on true biological notions, could not but suffer accordingly. But in the last century, as at other times, it was sufficiently plain that children, in being born into the world, are born into society, and are under overpowering social influences, before (if one may so speak) they have any chance of being their proper selves. To say nothing of the bodily tendance they receive—though this is really a fundamental condition of their ever having an intellectual development -let it be considered how determinate their experience is rendered by circumstances or the will of those about them. For long months-such are the conditions of human life - children are confined to the experience of but a few objects; and even these they become familiar with more through the direct action of others, carrying them about, than through initiative of their own. Apparently a restriction, this first effect of the social relation is, in truth, a potent factor in the development of knowledge. It supplies the best conditions for that association and fusion of impressions on the different senses which in some form must unquestionably be got through at the earliest stage of intellectual growth. Being destined to enter into a fabric of general knowledge, the discrete sense-impressions received by children must be elaborated in quite another way, and to quite another extent, than if, as in animals, they were merely to be used for the guidance of immediate action. It is no small thing for children, that the range of their early experience is so narrowed as to give them a chance of becoming perfectly familiar with all the details of it.

It is not, however, till a stage after the

earliest-though still a very early onethat the effect of social conditions upon the intellectual development of children becomes most marked. Before they are themselves able to speak and become full social factors, they begin to have the benefit of the spoken language that holds a society together. What can better help a child to identify as one object a complex of impressions appearing amid evervarying circumstances, than hearing it always indicated by the sound of the same name? The first business of children, before they rise to comprehensive knowledge, is to have a definite apprehension of objects in space; and to this they are helped not least effectively by the fact that there is a current medium of social communication about things, the advantage of which is, strictly speaking, forced upon them. Constraint there is, when one thinks how people are for ever obtruding names upon the child's ear, both when they have occasion to speak among themselves, and when they take occasion (as some are always found ready) to lavish attention upon babies. And though it may well be doubted whether children always relish the outpourings of social tenderness to which they must submit, there can be no question as to the intellectual advantages that, even through suffering, they receive. Their chief end, on emerging from in-fancy with their little stock of knowledge, is to understand and be under-stood by others; and, meanwhile, they have entered, without effort of their own, into possession of a store of names adapted to all the exigencies of intelligent intercourse.

But this is only the first, and not the chief, intellectual gain that accrues to children from the existence of readymade language. Whatever the occasion may have been that first called into play the expressive faculty between man and man, it is beyond dispute that language is required mainly for purposes of general knowledge. The language spoken by a race of men is an accurate index to the grade of intellectual comprehension attained by that race, and the intellectual progress of the race may be traced in the gradual development of its speech. See, then, what comes to the opening mind of the child with the use of his mother-tongue. The words and senten-

ces that fall upon his ear and are soon upon his lips, express not so much his subjective experience, as the common experience of his kind which becomes, as it were, an objective rule or measure to which his shall conform. Why, for example, does a child have no difficulty about the relation of substance and qualities that has given philosophers so much trouble? and why do all children understand or seem to understand it alike, whatever their experience may have been? Why? but because the language put into their mouths, and which they must e'en use, settles the point for them, one and all; involving, as it does, a metaphysical theory which, whether in itself unexceptionable or not, has been found serviceable through all the generations of men. Or, to take that other great uniformity or law of knowledge which has become so prominent in philosophical speculation since the time of Leibnitz and Kant,—why do we all assume that every event must have a cause? Let it be granted-though this is, perhaps, doubtful-that all men do and must always make the assumption. The philosophical difficulty is how any human mind can so far transcend its own limited experience as to make an assertion about all possible experience in all times and places, and it is well known how it has been met by the opposite schools: those at one extreme declaring in various phrase that it is the mind's nature, before all experience, so to interpret any experience; and those at the other extreme making what shift they can to show how the conviction springs up with, or is developed from, the individual's experience. For my part, I can agree with neither. I cannot go with those who declare that no amount of experience, in any shape or form, can be the ground of such conviction as we do, in fact, have of universal causation. But I can as little go with the other class of thinkers, when they suppose that a conviction like that is left to the individual to acquire by private experience or effort. Long before children have the least occasion to try what they can do in the way of generalisation upon their incidental experiences, it is sounded in their ears that things in the world are thus and thus; and that child were indeed a prodigy of pure reason who

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should pause and gravely determine not to take on the yoke of social opinion till he could prove it, of himself, well founded. He does—he must—accept what he is told; and in general he is only too glad to find his own experience in accordance with it. And if to this it be objected that children cannot understand the generalities they hear unless by reason of native principles in their intellectual consciousness, the answer is, that they do not by any means begin by understanding them. This comes only very gradually to the best of us, and to some comes hardly at all.

On the whole, then, the description I would give of our early progress in knowledge—and the early progress is decisive of our whole manner of knowing till the end—is something like this: that we use our incidental, by which I mean our natural subjective, experience mainly to decipher and verify the ready-made scheme of knowledge that is given to us en bloc with the words of our mothertongue. This scheme is the result of the thinking, less or more conscious, and mainly practical, of all the generations of articulately speaking men, passed on with gradual increase from each to each. For the rest, I should be the last to deny, having before asserted, that the part we are intellectually called to play is predetermined for each of us by a native constitution of mind, which, on one side, assimilates us in way of thinking to all other men of our race and time, if also, on another side, it marks us off from all other men and contains the deepest ground of what is for each of us our proper self. But I desire to express the opinion that there is no explanation of any mind's knowledge from this position, even when account is taken also of all the modes of natural experience noted by psychologists, unless there is added, over and above, the stupendous influence of social conditions, exercised mainly through language. How far would his native mental constitution (whether regarded as an inheritance or not) with all his senses and all his natural activities carry a child in the direction of knowledge, supposing him to grow up face to face with nature in utter loneliness? I believe it would need an effort which none of us can so far abstract from the conditions of our know-

should pause and gravely determine not ledge as to be able fully to make—to to take on the yoke of social opinion conceive how insignificant such a creatill he could prove it, of himself, well ture's knowledge would be.

It should be understood that the question raised in this short paper (written originally as a mere thesis for discussion) is a strictly psychological one. The psychologist's concern in knowledge is to show how it is generated in the mind. For this, he must carefully analyse knowledge, as it appears in himself and others, so as to have insight into the matter he would explain, and his work is done when he then shows how knowledge arises in each of us naturally. It is another and very different question-what knowledge is to be held as objectively true or valid for all minds alike. When is my knowledge such that I may claim your assent to it? To answer this question, or, in other words, to determine the conditions of scientific knowledge, belongs to philosophy in general or logic in particular, and remains an imperative task after any amount of psychological inquiry. But the psychological question, within its own limits, is a very real one, and it is indeed the natural, if not the necessary, preliminary to the other.

Even as psychological, however, the question is here in various ways narrowed. It is a question referring only to knowledge, to the exclusion of feeling and willing, and to knowledge only as it appears (naturally) with a character of uniformity among different men. The social influence insisted upon does nothing to explain the intellectual idiosyncrasies of each individual: these, if explicable at all in their variety, must be traced to special inheritance (as suggested above) or incidental experience. the other hand, it is plain that the influence extends beyond intelligence proper to the other great mental phases of feeling and willing. The tendency of men to feel and act alike is indeed even more apparent than to think alike, and assuredly has its explanation not least from the social tie which, from the first, is as a spell upon the individual; though here again, it may be remarked, there is an ulterior question-whether the feelings and acts naturally excited in men, from association with their fellows, are justifiable in the sight of philosophic reason. The effect of the social relation on the

mental development of the individual is, I repeat, a purely natural factor for the psychologist to reckon with; or, at least, it is so in the first instance, however it may afterwards seem, on evolutionist principles, to carry its justification with it. Yet it has by psychologists generally

been quite ignored.

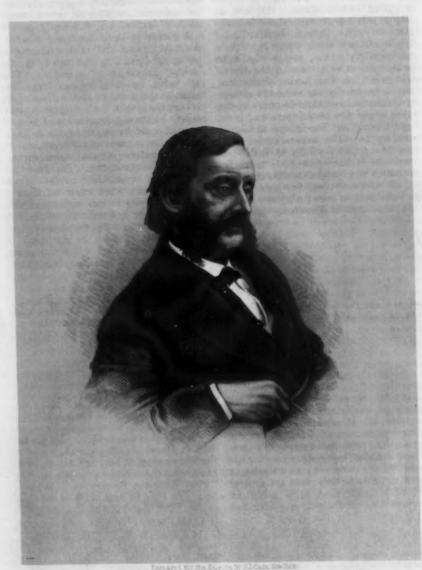
The same century that has seen the development of the 'historical sense' has first begun to comprehend the relation of perfect solidarity subsisting between the individual and society, and for a very good reason. It is, in fact, but one conception differently applied-when the varied life or history of a nation is viewed as growing out of its past, and when the mental life-history of individuals is seen to be determined by the social conditions and traditions into the midst of which they are born. Nor is the doctrine of general organic evolution itself, the latest outcome of thought in the century, aught but a more extended and intenser reading of the same conception. So far as concerns the social relation in particular, it may truly be said that to no one thinker or school of thinkers belongs the exclusive credit of having grasped its import for psychological theory. The notion of man as never separable (except by abstraction) from the social organism has emerged at the most different planes of thought, and been suggested by various lines of scientific inquiry. Yet it were almost an injustice not to recognise the peculiar impressiveness with which it was proclaimed by Comte, considering where he stands between those who went before him and those who have come after. If he had much to learn in the matter of psychological analysis from the 'ideologists' whom his soul abhorred, the lesson contained in his protest against their individualism has in turn been too little or too slowly regarded. It is remarkable how much of the celebrated English work of the present century in philosophy or psychology has continued to be done from the individualistic point of view. Mill's theory of knowledge, for example, greatly as it is in advance of Hume's as a serious constructive effort, is yet only such a doctrine (whether of everyday experience or of organised science) as Hume himself might have set forth a hundred years ago, had he been really minded, as he at first professed, to

work towards a positive theory, instead of spending his strength in pricking the bubbles blown by dogmatic metaphysicians. Professor Bain's psychological researches have been almost wholly analytic, in the manner of Hartley's; of extreme importance as such-witness, in regard to the very question of the sources of knowledge, his discovery (for it was hardly less) of the element of muscular activity in objective perception - yet merely adding to the list of formal factors involved in a complete psychological construction. Mr. Spencer, it is true, has always looked beyond the individual for an explanation of the facts of mental life, intellectual or other, but he has concentrated his energy as a psychologist on the elucidation of the principle of heredity. It is only in more recent psychological works, like Mr. Lewes's, or as yet in less systematic essays and general literature, that the social influence of man on man is forcing its way to recognition as a condition second to none in the actual process of mental development.

A few words may be added, before closing, on one question that suggests itself. How does the recognition of social influence in the development of the individual's knowledge affect the position now commonly called Experientialism? It is here conceded, as a matter of fact, that no one's knowledge is explicable from his individual experience. Although, of course, there is a sense in which all that a man knows must have been experienced by himself, it is nevermore true that it depends upon the individual as such, either actively or passively, what his knowledge shall be. Doubly, as we have seen, is he beholden to his fellows. He comes into the world what he is, even on the most strictly personal side, through his ancestors having been what they were and done and borne what they did in their time. And no sooner is he in the world but he enters

^{*}It should be noted, however, that in one of his most characteristic researches—his doctrine of the growth of Volition—Professor Bain has by no means confined himself to the analytic attitude; and here it is interesting to observe that he distinctly posits the social influence as a factor in the development, when showing how volition is 'extended' by imitation.





T. W. HICGINSON.

upon the heritage of social traditions in store by the teaching of the older experithe speech and ways of his kind. Not his to wrestle by himself with a confused and perplexing experience, if haply he may attain to some rude construction of a world not too unlike that of other struggling human atoms. His task at the first is but to accommodate his experience to well-approved working rules supplied from without, which more than anticipate his wants; nor is it other to the last, unless he be one of the few in each generation who, having assimilated existing knowledge, are moved to enlarge the intellectual horizon—to pluck up the stakes where they found them and plant them farther out for others slowly to work up to. The experientialist doctrine thus appears wholly at fault if it means (as it has often been taken by supporters and opponents alike to mean) that all intellection was first sensation in the individual, or even (in a more refined form) that general knowledge is elaborated afresh by each of us from our own experience. Neither position can be maintained in psychology. And yet it is notorious that exactly those who now urge the presence of such à priori and ab exteriori factors in the individual's knowledge as are here contended for, and are not the least forward to make light of incidental experience, set most

entialists, and would affiliate their doctrine upon the work, such as it was, of Locke and Hume. For this there is a deeper reason than is commonly assigned. It is common to say that inherited aptitudes are, after all, only a slower result of experience, developed in the race instead of the individual; and the like may be said still more evidently of the social tradition deposited in the growing languages of mankind. The real bond, however, between experientialists at the present day and those of an earlier time is that both declare experience to be the test or criterion of general knowledge, let its origin for the individual be what it may. Experientialism is, in short, a philosophical or logical theory, not a psychological one. The fact that the pioneers of scientific psychology in the last century were experientialists in their philosophy is not without significance, but the two spheres of inquiry should not therefore be confounded. One may be Lockian in the spirit of one's general thinking, without allowing that Locke or his immediate successors read aright the facts of mental development. It is as a philosophical theory that Experientialism goes on steadily gaining ground .- The Nineteenth Cen-

THOMAS WENTWORTH HIGGINSON.

BY THE EDITOR.

LIKE Mr. Howells, whose portrait appeared in the March number of the magazine, Mr. Higginson belongs to the younger generation of American authors, and also like him has exercised a more or less decided influence upon the national literary taste. As an essayist, in which capacity he has made the greater part of his reputation, he is noted for the precision, finish, and easy elegance of his style, and for that cultured amenity of sentiment and manner which Matthew Arnold has characterized as "sweetness and light." The material for the following brief sketch of his life is taken chiefly from the new edition of "Appleton's American Cyclopaedia."

THOMAS WENTWORTH HIGGINSON, SON

chant and philanthropist, and lineal descendant of the famous Francis Higginson, was born at Cambridge, Mass., on the 22d of December, 1823. He graduated at Harvard College in 1841 and at the Theological School of Cambridge in 1847, and then became pastor of the "First Religious Society" at Newburyport. In 1850 he was the Freesoil candidate for Congress, but was defeated. His anti-slavery principles being distasteful to a portion of his congregation, he resigned his pastorate in 1850, and two years later became minister of a "Free Church" at Worcester. He took an active part in the anti-slavery agitation of this period, and in 1853 headed an attack on the Boston court-house for the of Stephen Higginson, a Boston mer- purpose of rescuing Anthony Burns, a fugitive slave then in custody of the United States marshal. In this affair he was wounded in the face by a sabre-cut; and one of the marshal's men having been killed, Higginson was indicted for murder, but the prosecution failed from a flaw in the indictment. In 1856 he went to Kansas; where he took part in the military struggle of the free-State settlers against the pro-slavery invaders from Missouri, being a brigadier-general on the staff of "Jim" Lane.

Previously to this, in 1853, he had published his first book, a compilation, in conjunction with Samuel Longfellow, of poetry for the seaside, entitled "Thalatta." In 1858 he retired from the ministry in order to devote himself exclusively to literature, and became a leading contributor to the Atlantic Monthly, in the pages of which the contents of most of his books first appeared. Soon after the outbreak of the civil war he recruited several companies of volunteers for a Massachusetts regiment, and was

commissioned as captain. In 1862 he was appointed colonel of the first regiment of South Carolina volunteers, the first black regiment mustered into the Federal service. He served with them for two years, chiefly in South Carolina and Florida, making various expeditions into the interior, in one of which he captured Jacksonville, Fla. He was wounded in August, 1863, and in 1864 had to retire from the service in consequence. He then took up his residence at Newport, Rhode Island, and has since been occupied with literary pursuits and public lecturing. The list of his works published subsequently to the one already mentioned comprises "Outdoor Papers (1863); "Harvard Memorial Biogra-phies" (1866); "Malbone, an Oldport Romance" (1869); "Army Life in a Black Regiment" (1870); "Atlantic Essays" (1871); and "Oldport Days" (1873). Besides these, he published in 1865 a new translation of Epictetus.

LITERARY NOTICES.

THE PAPACY AND THE CIVIL POWER. By R. W. Thompson. New York: Harper & Bros.

Mr. Thompson in this treatise adopts the same stand-point as Mr. Gladstone in his recent pamphlets-namely, that of the statesman rather than of the theologian. He makes no pretense of discussing dogmas or religious doctrine, but confines himself almost exclusively to the endeavor to prove that a man can not be at the same time a good Catholic and a good citizen of a state which has incorporated or is incorporating into its constitution and laws the principles of modern civilization, and that in particular he cannot be a good Catholic in the papist sense and a loyal citizen of the United States. His method of proof lies in an elaborate and detailed comparison of the doctrines of the Syllabus, of recent encyclicals, and of the Vatican Council, with those embodied in our national and State constitutions and laws, and which have been for two centuries the very breath of our national life. The antagonism thus developed is certainly of the most radical kind, and could hardly be stated too strongly; and lest any one should imagine that the antagonism is merely "logical" or "theoretical," Mr. Thompson proceeds to demonstrate by copious citations from their most popular and au-

thoritative periodicals and books that the extremest papal doctrines are being taught in their most uncompromising form and with singular energy and ability by substantially the whole Roman Catholic press and hierarchy of the United States. The teaching, moreover, is by no means of a theoretical or transcendental character, but is directed to pre-eminently practical ends and purposesthese purposes being the establishment of the absolute supremacy of the Pope in every department in which he may declare himself supreme, and the discrediting of every idea or sentiment which American Protestants have been taught to venerate. Throughout all this portion of his argument, which is the essential feature of his book, Mr. Thompson does not rely upon assertion or content himself with giving "the substance" of the doctrine discussed, but, in spite of the great expenditure of space which it involves, cites the actual words. He presents the Catholic pretensions as they are formulated by the church's best authenticated and most widely-accepted teachers, so that there can be no just ground for accusations of misunderstanding, unfairness, or misrepresentation.

After witnessing the pains taken in pointing out and defining the true proportions of the danger from papal pretensions, one naturally expects the author to indicate some practical remedy; for it is in the application of remedies to perplexing political situations that the people stand in greatest need of instruction. Here, however, Mr. Thompson contents himself with a page of "glittering generalities" which absolutely tend to befog the mind which by aid of the argument has probably been groping its way toward a conclusion. An astute Jesuit will smile to himself at the fervent exhortation to the people to "maintain at every hazard and in the face of all consequences their right to enact their own laws, to preserve their own constitutions, and to regulate their own affairs according to their own sovereign will, and without foreign dictation," knowing as he does that long before the Roman Catholics secure an actual majority of the voters, they can establish absolute sway over politicians who would spend their lives in assuring the people that the way to maintain all these things is to obey the benignant precepts of the priesthood.

The real remedy lies in education, and our own firm conviction is that this remedy can not be applied too soon or too thoroughly. The first step should be to make our schools absolutely secular, so as to afford no just ground of offense to any sect or faction; the next step should be to establish and rigidly enforce universal compulsory education; and the third step should be the introduction into the curriculum of every school of systematic though simple instruction concerning the fundamental principles that underlie our government and society. This, of course, would not be sufficient to eradicate the evil, but it is as far as a republican government can go, and it would do much to dissipate that dense mass of ignorance from which Roman Catholicism draws the great majority of its recruits.

Mr. Thompson deserves praise for the temper and tone of his exposition. He is neither a bigot in religion nor a fanatic in politics, and if his style is dry and sometimes tedious, he has undoubtedly presented material for earnest thought on the part of both the patriot and the scientific student of politics.

AN INTRODUCTION TO POLITICAL ECONOMY.

By Arthur Latham Perry, LL.D. New
York: Scribner, Armstrong & Co.

This compact and instructive little treatise is designed primarily for use as a text-book in high-schools and academies, and the author believes that "young persons of ordinary intelligence and training, who have reached the age of fourteen years, will find no difficulty in mastering every point in its pages." No concession, however, is made to what are supposed to be the peculiar needs of the

school-room; every principle is expounded with as much clearness and thoroughness and exactitude as in any of the larger treatises; and the foundations of the science are laid on such a basis that the students who have once mastered them as here presented will have nothing to unlearn, but will only need now and then to extend their knowledge in certain directions which are clearly pointed out. Professor Perry justly observes that it is of "no advantage, but quite the reverse, for any young person to gain a conception of a science that will have to be discarded afterwards for a better one, or to lay, in the interest of ease and quickness, temporary foundations that will have to be relaid before any solid and extended superstructure can be built upon them;" and his book is elementary, not in the sense that inevitable difficulties are either ignored or obscured, but that the statement of principles is simplified and clarified as far as possible, and rendered intelligible by illustrations drawn from those recent facts and events in this country and in Europe with which a reader or student is necessarily most familiar. Mere controversial topics are to a great extent avoided—the debatable ground of the science is appropriately left for a later and more detailed survey; and the author confines himself to giving clear and exact ideas of the principles and processes which underlie "Value," "Production," "Commerce," " Money," " Credit," and " Taxation." These are treated with satisfactory fulness and completeness, and the single chapter on "Value" constructs a broad highway through the densest jungles of the science.

What we have already said will be sufficient, perhaps, to indicate that the book will prove useful to many others besides youths and students. Such "grown-up" readers as have neither time nor disposition for more voluminous works can obtain from it a fair and adequate conception of what political economy is in its essence; while those who are already familiar with its literature will find here a convenient summary of the knowledge which they have arduously gathered from many sources.

TALES FROM TWO HEMISPHERES. By Hjalmar Hjorth Boyesen. Boston: J. R. Osgood & Co.

The difficulty of procuring really good short stories is one which is very familiar to editors of magazines, and presumably also to their readers, so that Mr. Boyesen will doubtless prove an especially welcome recruit to American letters. Since Bret Harte's earlier sketches, we have had nothing better than these "Tales from Two Hemispheres," and it is difficult to say in what respect two of them

at least, "The Man Who Lost His Name" and "A Scientific Vagabond," fail of being masterpieces. They are artistic in purpose, and finished in design; the characters are clearly individualized and easily awaken our sympathies; the accessories are appropriate and sufficient for local color, but not obtrusive; and the style is remarkably pure and graceful -the latter fact being especially noteworthy, as Mr. Boyesen is writing an alien and unfamiliar language. Three of the six stories which the volume contains have their scenes laid in Norway, and the action of the others occurs partly in Norway and partly in this country, most of the leading characters in all being Norwegians. In less skilful hands this mixture of heterogeneous elements would be apt to produce confusion; but Mr. Boyesen is equally at home in depicting the scenery and portraying the society of both countries, and he uses with admirable effect the contrast between the two nationalities.

One feature of Mr. Boyesen's work which perhaps hardly affords legitimate grounds of praise from a literary point of view, but which nevertheless predisposes us to kindness, is that he is an ardent admirer and generous critic of the American people, as well as of American institutions. He burns a subtle incense under our nostrils, and, in particular, is so enchanted with our ladies as to forget the time-honored foreign practice of objecting to their "independent ways."

THE TWO AMERICAS; An Account of Sport and Travel. With Notes on Men and Manners in North and South America. By Major Sir Rose Lambart Price. Illustrated. Philadelphia: J. B. Lippincott & Co.

The author of this book is evidently more at home with rod or gun than with the pen, and if he were asked his candid opinion, would probably say that the life of a sportsman is the loftiest and most enjoyable to which man can aspire. His travels embraced a voyage across the Atlantic in one of Her Majesty's naval vessels via the Madeiras and West Indies to Rio Janeiro, a long cruise down the eastern coast of South America and up the western to San Diego, and a number of excursions in California, Utah, and Nebraska; but the record is little more than a detailed account of how he "shot" game and " killed " fish in the various localities visited, the relative attractiveness of each place being to a great extent gauged by the opportunities which it afforded for this pastime. True, Sir Rose manages to convey in general terms his impression of society and cities, and he indulges now and then in brief political disquisitions; but his descriptive powers are, to say the least, not remarkably striking, and his

thoughts about politics are so infantine in their simplicity that they can hardly awaken other than a smile, while he himself evidently regards all these as mere asides from his serious work of telling us how and where he made his "bags."

In spite of its limitations, however, the book takes a certain interest from its author's character, which is unmistakably that of a frank, hearty, unaffected soldier. He would probably prove more agreeable as a personal acquaintance than as a writer, though one would doubtless feel toward him as Charles Lamb did to Crabbe Robinson:—"Decent respect shall be Crabbe Robinson's, but short of reverence."

THE HERITAGE OF LANGDALE. By Mrs. Alexander, Author of "The Wooing O't," etc. Leisure Hour Series. New York; Henry Holt & Co.

One thing at least is clearly proved by "The Heritage of Langdale," and that is that historical romance is not Mrs. Alexander's forte. The scene of the story is laid at the beginning of the eighteenth century, and great pains have evidently been taken to reproduce the manners, ideas, customs, and modes of speech of that period; but there is an utter failure to maintain the perspective, so to call it, and there is no genuinely antique flavor to the book, in spite of its studiously archaic forms of language. Regarded simply as a narrative, the story is not without merit, though somewhat sensational in character, and it exhibits Mrs. Alexander's skill in devising interesting situations and enlisting our sympathies in behalf of her imaginary persons; but, taken as a whole, it is so decidedly inferior to the standard established by her previously published works that it should suffice to warn her against a repetition of the mistake.

THE BEST READING. A Classified Record of Current Literature. Fourth Revised and Enlarged Edition. Edited by Frederic Beecher Perkins. New York: G. P. Putnam's Sons.

The fact that this work has passed through fourteen editions since 1872, and has been four times enlarged, is sufficient evidence of its adaptation to a widespread want, and we can testify from personal experience that it is not less useful to the private purchaser of books than to libraries and booksellers. In its present edition the work has been greatly improved. The list of topics under which the books are classified has been simplified and enlarged; many titles of suitable books previously omitted, and of others subsequently published down to August, 1876, have been added in their proper places; and short lists have been included of French, German, Span-

ish, and Italian books, "with the intention of pointing out cheap editions of such standard writers and such easy and amusing introductory books as can probably be procured at any time, and as are most likely to be useful to students." The book is still far from being a complete bibliography even of current literature, but then it makes no claim to be considered as such, aiming only to furnish the name and price of the "principal good books that can be got" on the various topics in which the average reader will feel interested.

FOREIGN LITERARY NOTES.

Mr. Ruskin is now publishing in shilling parts St. Mark's Rest: "the history of Venice written for the help of the few travellers who still care for her monuments."

M. GUSTAVE FLAUBERT has in the press four new legends, etc., two of which are borrowed from antiquity, and two from modern life. They are said to be superior to all his later works.

PROFESSOR LUIGI FERRI, who fills with so much distinction the Chair of Theoretical Philosophy in the University of Rome, is at work, it is said, on an elaborate criticism of the Scottish school of metaphysics.

M. MICHELET, the historian, and author of "Priests, Women, and Families," "La Femme," "L'Oiseau," "L'Insect," etc., has left behind him a voluminous diary, full of personal anecdotes of the men of his day. His widow is engaged in preparing the MS. for the press.

Mr. Grote, the late President of University College, bequeathed a sum of 6,000% for the endowment of the Professorship of Philosophy of Mind and Logic, which bequest was to be received by the college on the death of Mrs. Grote. That lady, however, desiring that the endowment should be made available immediately, has handed over to the council of the college a cheque for 6,000%.

A BROCHURE, entitled "The Catholic Press in Europe in 1877," has just appeared in Würzburg, and gives the following particulars as to the number of Roman Catholic publications in the German empire: Hesse produces II, with 75,500 subscribers; Baden, 12, with 37,400; Würtemberg, 11, with 42,700; Saxony, 3, with 2,000; Bavaria, 54, with more than 380,000; and Prussia, 144, with at least 500,000 subscribers.

Messes, Trubner & Co. announce an "English and Foreign Philosophical Library," Among the works either in the press or in ac-

tive preparation are "The History of Materialism," by Professor F. A. Lange, translated by Ernest C. Thomas; and "Outlines of the History of Religion to the Supremacy of the Universal Religions," by Professor C. P. Tiele, translated from the Dutch.

The ingenious writer of Mr. Carlyle's letter on Mr. Darwin may congratulate himself on having successfully mystified no less a critic than Mr. Ruskin, who does not seem to have noticed the semi-official denial of its authenticity which appeared in the papers at the time. In the new number of Fors Clavigera Mr. Ruskin prefaces it with the remark that "the following noble letter will not eventually be among the least important of the writings of my Master."

RAM DAS SEN, whose essays on some of the principal poets of India have excited great interest among Sanskrit scholars, has just published a second volume, called Historical Essays (Aitihasika Rohasaya). They treat on various subjects, the most important being "The Vedas," "Buddhism," "The Pali Language and Literature," "Jainism," "The Era of Sâlivâhana," "The Indian Stage," etc. An English translation of these essays, or of a selection from them, would be welcomed by all friends of Oriental literature.

PROF. PAUL DE LAGARDE, of Göttingen, is going to bring out a revised edition of R. Saadiyah Gaon's Arabic translation of Isaiah. This translation was edited from the unique MS. of the Bodleian Library, by Prof. Paulus, in 1791, somewhat incorrectly. The Paris Library has lately acquired another MS. of this translation, written in Yemen. It is more correct and fuller than the Bodleian MS. Prof. Lagarde's accurate editions of texts are well known, and we scarcely need state that we may expect from him a final correct edition of this early translation of Isaiah.

According to the Vasarnap Ujsdg, at the commencement of this year 268 periodicals, or an increase of 28 over last year, were appearing in the Magyar tongue. Buda-Pesth maintains 128 of these publications, 139 are issued in provincial towns and cities, and one is published abroad. Only 17 dailies and 26 weeklies are devoted to politics, non-political local news filling the pages of the majority. Hungary supports also 146 foreign journals, 85 of which are in German, 42 in Sclavonic, 13 in Romanish, 4 in Italian, 1 in Hebrew, and 1 in French.

SALOMON HIRZEL, the publisher, has left the whole of his precious collection of Goethe books and MSS, to the Leipzig University, upon the condition that it be kept undivided and be exhibited as the "Hirzel Goethe Library." Its importance to Goethe students may be judged from the fact that, amongst other things, it contains nearly four hundred original MSS., besides sixteen quarto volumes of extracts from various publications concerning the author of "Faust." Hirzel also possesses a "Zwingli Library," which he has bequeathed to the University of Strasbourg.

MR. TREVELYAN accompanies the second edition of his Life of Lord Macaulay with a preface, in which he announces that he has been able to draw upon "a certain quantity of supplementary matter" which has been furnished to him since the appearance of the first edition. The letters which he has received, he tells us, bear witness to the wide interest with which Lord Macaulay inspired his readers. "It is not too much to say," he says, "that, in several instances, a misprint, or a verbal error, has been brought to my notice by at least five-and-twenty different persons." To another class of criticism he has been unable to defer.

"I have frequently been told by reviewers that I should 'have better consulted Macaulay's reputation,' or 'done more honor to Macaulay's memory,' if I had omitted passages in the letters or diaries which may be said to bear the trace of intellectual narrowness, or political and religious intolerance. I cannot but think that strictures of this nature imply a serious misconception of the biographer's duty. It was my business to show my uncle as he was, and not as I or anyone else would have had him."

There can be no doubt that the reproof is just. Mr. Trevelyan has done more for his uncle's fame by revealing the blemishes in his character, than if he had attempted to conceal them.

SCIENCE AND ART.

ASTRONOMICAL OBSERVATIONS ON THE AT-MOSPHERE OF THE ROCKY MOUNTAINS. - Prof. Henry Draper has taken advantage of a hunting-excursion to observe the effect of elevation on the transparency and steadiness of the air, as bearing on the question of establishing an observatory at a great height above the sea, an idea which suggested Prof. Piazzi Smyth's expedition to the Peak of Teneriffe, and which was further carried out in the selection of a mountain station for observing the solar eclipse of 1871 in Southern India. Prof. Draper's experience is certainly not encouraging. At Salt Lake City, nearly 5,000 feet above the sea, and also at higher elevations on the Pacific railroad, he found the air very unsteady, and the twinkling of the stars very troublesome, while on inquiry it turned out that on the average 194 days of the year are cloudy, though the rainfall is only about eighteen inches. Other places at higher elevations were equally disappointing, the air, though very

transparent, being very tremulous, with the exception of one station, 8,900 feet above the sea, where on two successive nights the air was remarkably pure and tranquil, though the furious wind would make it difficult to use a large telescope, while the intense cold at all these elevated stations would prove a great hindrance to effective work. In any case, observations could only be carried out for five months of the year, the district being impassable from snow during the months from October to May.

Mr. Crookes' RADIOMETER.-Mr. Crookes' last accounts of experiments with his radiometer are full of interesting detail. By means of a pendulum vibrating within the glass bulb of the radiometer, he determined what he calls the "viscosity" of the imprisoned air. The rate at which the pendulum's vibrations are diminished indicates and measures this viscosity. While the air in the bulb is rarefied to such a point that the vanes revolve, they having become susceptible to radiation, there is scarcely any change in viscosity. When the air is still further rarefied, up to the point when the vanes are most susceptible, the viscosity is somewhat though not greatly diminished; but after this, if the air be furthed rarefied, the viscosity falls off with great rapidity. In the most complete vacuum attainable, the facility with which the vanes rotate by radiation is reduced one-half; the obstruction to the vibration of the pendulum is reduced to a twentieth. In this extreme rarefaction the radiant force no longer acts suddenly; it takes time, thereby giving proof that it acts not directly but indirectly. Mr. Crookes candidly announces his adhesion to the generally received theory of the radiometer in the following explicit words: "The repulsion from radiation is due to an action of thermometric heat between the surface of the moving body and the case of the instrument, through the intervention of the residual gas."

PRESERVATION OF IRON FROM RUST.-Professor Barft, Professor of Chemistry at the Royal Academy, has made a great practical discovery. He has discovered how to treat iron vessels so as to render them wholly safe from the tendency to rust, so that boilers, if the iron of which they are made had been thus treated, would be safe against the corrosion caused by the water; and cooking vessels would no longer need either to be made of copper or furnished with a tin lining; while spades and rails, and iron keels and plates, and the locomotives on our lines, and all the countless iron instruments of our modern life, would be safe against the most destructive of all the agencies which waste

them away. The process is to coat the iron with the magnetic or black oxide of iron, which is not only incapable of rust, but harder than the iron itself, and which adheres to the iron with a tenacity greater than that with which the various strata of the iron adhere together. Professor Barff subjects the iron to superheated steam at a temperature of from 500° to 1200 Fahrenheit, and if the exposure is continued for from five to seven hours, this coating will be fairly formed; and if the latter temperature be secured, it will adhere so closely that not even a file will scrape it off. Professor Barff left iron vessels thus treated out on the lawn for six weeks during the late rainy weather, and when brought in they were as bright as before their exposure. The coating does not affect the surface, except by turning it black. If the surface were rough before, it will be rough still; and if polished before, it will be polished still. Nor in case the magnetic oxide is detached in parts, will the rust which then begins on the exposed iron, spread underneath the magnetic oxide. On the contrary, the coat clings so close that though the rust will eat into the iron at any exposed part, it will not extend laterally to the iron still coated by the magnetic oxide.

THE NEW STAR OF 1866.-After the disappearance of this star to the naked eye, it appears to have been watched in the telescope by only two observers, Schönfeld and Schmidt. The latter has now discussed in the Astronomische Nachrichten the observations which he has made pretty continuously for the past eleven years, tending to show that there has been a decline of brightness from the second to the tenth magnitude, at first very sudden, and then more and more gradual, till in the last year or two it has become nearly imperceptible. During the whole period there have been fluctuations of brightness at tolerably regular intervals of ninety-four days, which Schönfeld was the first to point out, and which Schmidt has confirmed from the whole series of observations. While these changes of brightness were taking place, the color of the star appears to have remained pretty constant, being pale yellow as long as it could be distinguished with certainty.

THE SPIROPHORE.—A doctor in Paris has invented an apparatus which he calls a spirophore, to be employed for the relief of persons suffering from asphyxia or suffocation. It may be described as a chamber constructed of zinc: in this chamber the patient is placed, but his head remains outside. Air is then drawn from the chamber by a pump; the patient's lungs expand: air is then pumped

into the cylinder, and the lungs contract; and this operation is continued at intervals until the patient recovers.

THE ELECTRICAL CONDUCTIVITY OF WATER. -Many determinations have been made of the electrical conductivity of water. The results differ greatly, Pouillet's value, for instance, being about sixty times as great as that obtained by Magnus. Prof. Kohlrausch has recently turned his attention to the general subject of liquid resistances, and in the case of water has taken the utmost care that the specimens experimented upon should be absolutely pure, being satisfied that the enormous differences between the results previously obtained were due to impurities. In order to prevent polarisation-one of the chief difficulties in determining the resistance of a liquid-Prof. Kohlrausch employed an arrangement by which currents alternately in opposite directions could be passed through the water, a method which was found to be entirely successful. During the measurement of the resistance the water was only in contact with platinum, being contained in a platinum spherical basin, which served as one electrode. The other electrode consisted of a similar spherical platinum surface, which when placed within the first could be made concentric with it. The water was placed between the two and thus formed a portion of a spherical shell. The sample of water which gave the lowest conductivity had been twice distilled, the second time being condensed in a platinum worm, and passed at once into the vessel in which its resistance was to be tested. This sample had a resistance twice as great as that found for water by Magnus, and 120 times as great as that found by Pouillet. Its magnitude may be better appreciated when it is stated that a column of such water one millimètre in length offers a greater resistance than a copper wire of the same section, extending all the way from the earth to the moon and back again. When the water during distillation was condensed in a glass worm, its conductivity was found to be increased more than tenfold, the explanation being no doubt that the water had dissolved some of the alkali out of the glass. Prof. Kohlrausch's paper quoted above contains also the results of similar experiments with ether, alcohol, and other badly-conducting liquids.

Preservative Effects of Ozone.—The following account of an experiment with ozone may be interesting to non-professional readers: "A piece of fresh beef was cut into two equal parts, one of which was placed in a stoppered bottle containing ordinary air, and the other in a similar bottle containing

ozonised air. In five days the meat in the first bottle was in full putrefaction, while that in the second bottle containing ozonised air, was as fresh as when put in, nor was any change manifested on the tenth day, when the bottle was opened to see if the meat had any offensive odor. Although the stopper was then quickly replaced, putrefaction had commenced on the following day. Milk was kept in ozonised oxygen for eight days without undergoing any change."

Swiss Health Records.-From a paper read before the Helvetic Society of Science at Basel we learn that the fever districts of Switzerland are the valley of the Rhone in its middle course between Martigny and Brieg, and some parts of the canton Tessin. Owing to the large extent of marshes in these districts, malaria and intermittent fevers and neuralgia prevail in the summer and autumn. The effect of town-life in promoting consumption is made evident by the fact that in Zurich the deaths from pulmonary phthisis are one hundred and four to the thousand, while in Zug they are not more than seventeen. Tillers of the ground have thus an important advantage over those who work in shops and factories. Consumption disappears with altitude, and dwellers on the mountains or in the upper valleys are free from it; but on the other hand they are very liable to inflammation of the respiratory organs. Deaf and dumb persons, in proportion to the population, are more numerous than in any other country of Europe. And lastly, we gather that "alcoholism" is on the increase in Switzerland as well as elsewhere.

THE RANGE-FINDER. - Captain Watkin, R.A., has invented a range-finder, under different forms, for use in military and naval training and in time of war. If a hostile ship is approaching our coast or working her way into a harbor, it is important to know her exact distance, so that she may be hit by the heavy shot of the defensive battery. range-finder, which is a combination of a telescope and a spirit-level, requires not more than eight seconds to indicate the distance in yards on a scale, and the guns can then be brought to bear with unerring accuracy. Should the ship be hidden by smoke, observers with an electric position-finder are stationed some way off, and make known her movements by telegraph, whereby the gunners can keep up their fire although they cannot see the enemy. This seems incredible; but the explanation is, that by means of charts ruled in squares, the position of a ship in any square or any part of a square can be identified, and aim taken accordingly. Another form of range-finder, of very simple construc-

tion, is intended for use on land. It is a japanned metal box ten inches by four, with a few holes in two sides, and one half of the top free to open by a hinge. Inside is an arrangement of mirrors, and a boxwood scale of yards from six hundred to four thousand. With this instrument and three staves, used in determining a base, one man by himself can ascertain the range of an object—a battery, a wood, a river, or a body of men—in three minutes; with two men it can be accomplished in one minute. Truly we may say that the art of killing becomes more and more scientific.

VARIETIES.

Novel-writing as an Art.-Thackeray made it his boast that he had never written a line which any girl need blush to read. We wish the same could be said of every writer of the present day. Ladies are now the chief novel-writers; and it is not to the credit of the sex that so many stories, objectionable both in tone and style, should proceed from their pens. Yet the fact is not to be wondered at. On the contrary, it is just such a result as might have been anticipated. From the more restricted circumstances of their lives, they have been forced to rely for the interest of their story less on objective than on subjective themes; and this has obliged them to touch on topics and open questions which men avoided. How far these themes are a legitimate motif for art is, and probably always will be, a disputed point. Whatever is is a fit subject for the artist, poet, or novelist, is the principle of a certain school, in spite of the teaching of experience that there are hideous realities of life utterly unfit for artistic treatment, and which, however handled, can only debase. A great master-a Shakespeare or a George Eliot-may venture to point a moral from such things; but even in his hands they are painful, and no inferior artist should touch them. And here has been the fatal mistake made by ordinary lady novelists. They have ventured on ground which could only with safety be trodden by a Madame Sand or a George Eliot. In inferior hands Adam Bede would have been repulsive, and Consuelo unreadable. The melancholy fact remains that these objectionable novels find a public; and so long as that is the case moralists may lament and protest in vain. Whether demand creates supply, or supply demand, is a question for the political economists to settle. In either case there is no doubt that increase of appetite is bred by what it feeds on, and a vitiated taste continues to crave for stronger and stronger doses, till the perplexed purvey-

or of such poisoned food has not a sentiment of modesty left to outrage, nor a law of morality to scoff at. He ransacks heaven and earth for a questionable "situation;" and when he has found it, rejoices that he can leave his reader tenfold more the child of perdition than before. His sole fear is that he may have been anticipated by some rival dealer in such wares. In truth his novels are mentally what adulterated drink is physically; and in both cases the remedy can only be hoped for in an improved tone of feeling on the subject. Among these vicious novels we are far from placing the sensational stories, against which so much has been written and said, and even preached. Sensational novels-mere stories full of murder and mystery-do answer to a certain want in the human mind. Men who have been engaged all day in hard intellectual work find relaxation in a fiction where horrors and impossibilities are piled on each other with apparently reckless disregard of probability. Apparently, for we should remember that sensations are always occurring in real life. Every scandal, every mercantile failure, every murder or robbery, is a sensation in its own way, the history of which is eagerly read and canvassed by thousands. All important news is sensational; and so long as a plot is considered essential to a story there must be more or less of sensation in it .- Tinsley's Magazine.

NAPOLEON'S MANNERS .- Macaulay, in comparing Napoleon to Cæsar, very rightly says that Cæsar was greatly his superior on one point, he was a perfect gentleman. Talleyrand wittily expressed nearly the same thing when he said, "What a pity that such a great man should have been so badly brought up!" If we may judge, not from the reports of his enemies, but from the disclosures of his most faithful and devoted servitors, Napoleon treated those who were admitted into his intimacy with a familiarity that no man who had any self-respect would have tolerated for a minute. Meneval, his former secretary, represents him as pulling the ears of his interlocutors, sometimes hard enough to make the blood flow, giving them a slap on the cheek, at times even sitting on their knees. These acts of graciousness were marks of special kindness with him, and men of the highest rank were proud of such tokens of favor. Such habits were calculated to produce stiffness in his manners with strangers. He was too familiar when he wished to please, and too stiffly declamatory when he wished to command respect. As to his body, the fatigues of war had strengthened his iron constitution, and given him a stoutness bordering on embonpoint. Napoleon acknowledged that he never was better than during this hard campaign, in which he often rode thirty leagues a day over the snow. The agitations of war may be said to have become needful to his temperament, a necessity for his health, and in some sort the indispensable aliment of that immense activity which was the predominant characteristic of his nature. He literally lived on what would have killed others. War gave him both sleep and appetite. A great deal of the Corsican still remained in him. He had passed through the refined civilization, the kind of philosophical chaos, of the eighteenth century, appropriating to himself with a wonderful faculty of assimilation all that could be of service to him; he had turned to account its ideas, adopted its forms and language, but in reality the primitive man had been but little modified. He had retained even certain superstitions of his countrymen, which were like stamps of his origin. He whose only religion was a faith, more often affected than real, in his star, was sometimes seen, says Meneval, suddenly to make an involuntary sign of the cross on the announcement of some great danger or some grave event. And the nalf secretary adds, in order to give a philosophical turn to the fact, that this gesture might be interpreted by the expression, Almighty God! Under his apparent good nature too, and his feline gracefulness of manner when he wished to appear kind, was hid the old harshness and insurmountable mistrust of the islander always on his guard against his enemies. It was noticed that during the nineteen days that the two emperors spent together, in the midst of effusions of the tenderest friendship, Alexander took his meals every day with Napoleon, but Napoleon never once broke bread with Alexander.-Lanfrey's History of Napoleon the First.

REQUISITES FOR A HAPPY MARRIAGE,-A certain sort of talent is almost indispensable for people who would spend years together and not bore themselves to death. But the talent, like the agreement, must be for and about life. To dwell happily together they should be versed in the niceties of the heart. and born with a faculty for willing compromise. The woman must be talented as a woman, and it will not much matter although she is talented in nothing else. She must know her métier de femme, and have a fine touch for the affections. And it is more important that a person should be a good gossip, and talk pleasantly and smartly of common friends, and the thousand and one nothings of the day and hour, than that she should speak with the tongues of men and angels; for a while together by the fire happens more frequently in marriage than the presence of a distinguished foreigner to dinner. That people should laugh over the same sort of jests, and have many a story of "grouse in the gun-room," many an old joke between them which time cannot wither nor custom stale, is a better preparation for life, by your leave, than many other things higher and better-sounding in the world's ears. You could read Kant by yourself, if you wanted, but you must share a joke with some one else. You can forgive people who do not follow you through a philosophical disquisition, but to find your wife laughing when you had tears in your eyes, or staring when you were in a fit of laughter, would go some way toward a dissolution of the marriage. I know a woman who from some distaste or disability could never so much as understand the meaning of the word politics, and has given up trying to distinguish Whigs from Tories; but take her on her own politics, ask her about other men or women, and the chicanery of everyday existence-the rubs, the tricks, the vanities on which life turns-and you will not find many more shrewd, trenchant, and humorous. Nay, to make plainer what I have in mind, this same woman has a share of the higher and more poetical understanding, frank interest in things for their own sake, and enduring astonishment at the most common. She is not to be deceived by custom, or made to think a mystery solved when it is repeated. I have heard her say that she could wonder herself crazy over the human eyebrow. Now in a world where most of us walk very contentedly in the little-lit circle of their own reason, and have to be reminded of what lies without by specious and clamant exceptions-earthquakes, eruptions of Vesuvius, banjos floating in mid air at a séance, and the like-a mind so fresh and unsophisticated is no despicable gift. I will own I think it a better sort of mind than goes necessarily with the clearest views on public business. It will wash. It will find something to say at an odd moment. It has in it the spring of pleasant and quaint fancies. Whereas I can imagine myself yawning all night long until my jaws ached and the tears came into my eyes, although my companion on the other side of the hearth held the most enlightened opinions on the franchise or the ballot,-Cornhill Magazine.

THINGS NEW AND OLD.—It is frequently remarked that the literature of Punch in the present day is far inferior to the past. The truth is the art of humorous writing is rapidly becoming lost in the practical and moneymaking habits of the day. Moreover, the litterateur, the journalist, and the author have been bitten with the ostentation and false glitter of the times. A Punch writer nowa-

days does five times the work that a Punch writer found necessary five-and-twenty years ago. He pays double his former rent, his wife gives receptions, he belongs to several clubs, he drinks champagne regularly-in short, he is dragged at the chariot-wheels of Mammon. He imitates his rich neighbor, who makes money in the City; he must dress up to my lord whom he meets at a West-end salon. Therefore he must do all kinds of work; any body can engage his pen at a price; he writes for the newspapers; magazine editors may always rely upon him for copy; he writes books; and he is continually cudgelling his brains to know how he may make money. In the old times his chief anxiety was his copy for Punch. The Arcadian days of leap-frop on Jerrold's lawn are over. Solemn dinner parties at Lavender Sweep, the residence of Tom Taylor, Esq., are more in keeping with the dignity of journalism. Nobody is to blame for the change. Times alter. We have entered a new phase of the world's history. But one has no right to expect the broad genial humor of free and natural manners to accompany the feverish desire to be rich and ostentatious which afflicts modern society. Cynicism has taken the place of humor. Men are all too much alike now. To be different from your neighbor is to be odd; to be eccentric is to be sneered at; and nobody can afford to be treated with indifference, much less with contempt. In the most prosperous days of Punch, Mark Lemon, Leech, Jerrold, Stanfield, and even Thackeray found time to play; they romped in a hayfield; they indulged in picnics; and a friend of mine saw Dickens in a difficulty with Mark Lemon's back as an incident in a game of "tuckin-your-twopenny." Fancy Mr. Tom Taylor encouraging this kind of thing. There are two or three young men on Punch who could easily be tempted into a revival of the old days; but the fun would be forced, the jocularity would not be genuine. No; the good old days are over and it's no use lamenting them .- From " The True History of Punch" in London Society.

AT THE PLAY.

DORA seated at the play
Weeps to see the hero perish,—
Hero of a Dresden day,
Fit for china nymphs to cherish;
O that Dora's heart would be
Half so soft and warm for me!

When the flaring lights are out His heroic deeds are over, Gone his splendid strut and shout, Gone his raptures of a lover, While my humdrum heart you'd find True, though out of sight and mind.

EDMUND W. GOSSE.

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